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Staff values in the Faculty of Health Sciences at La Trobe University

Duckett, Stephen John

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Stephen John Duckett

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University of Bath
School of Management

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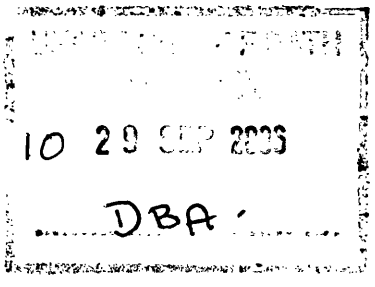
ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106-1346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SUMMARY

This thesis addresses the question of organisational values in a university setting. Value statements are common in contemporary organisations, but studies of the extent to which these statements are observed in practice are rare. Although there have been a number of studies which have asked academic staff about their values, no such studies could be found which attempted to track observance of *espoused* values. This thesis addresses that lacuna. It reports the development of a set of value statements for the Faculty of Health Sciences at La Trobe University in Melbourne, Australia. It then reports on a survey (response rate 39%) which asked academic and administrative staff the extent to which they endorsed the values statements, and the extent to which those values were observed in practice. Factors which might inhibit value observance were also elicited.

In brief, the study found a very high level of endorsement of the developed value statements, and also relatively high levels of value observance. Differences were found in the level of value observance in different Schools, in different types of work environments (especially between Centres which had a research-only focus and Schools responsible for both teaching and research), and between administrative and academic staff.

A particular focus of the thesis is drawing out the implications of these findings for the management of the Faculty. The thesis therefore concludes by making recommendations about how to strengthen value observance within the Faculty of Health Sciences.

Part I

Introduction

Chapter 1: Introduction and Literature Review

This thesis reports an analysis of a questionnaire of values held by staff. The questionnaire was developed as part of a Faculty planning study. This chapter introduces this thesis. It first outlines why I have come to study the issues of values in a University Faculty setting, then sets the scene by reviewing the literature on values in organisations, and universities in particular.

Project antecedents

This thesis is for a professional doctorate in higher education management. One of the distinctions between a professional doctorate and a 'traditional' PhD is that research for a professional doctorate has more direct relevance and applicability to practice (Morley and Priest 2001, Neumann 2005, Sarros et al 2005). In my case, I am Dean of the Faculty of Health Sciences at La Trobe University and the research and thesis informs, and is informed by, my work role. The focus of much of the discussion of results and of the concluding chapters is generally on providing practical implications and learnings for me in my role as Dean. Because this thesis is for a doctorate, these implications and learnings are research-based. The thesis also recognises the importance of contributing to the broader literature.

The project itself has two work-related antecedents. First was an interest in staff morale in the Faculty of Health Sciences. Monitoring morale of staff or the organisational 'climate' is an important part of the management process. The quality of interaction with students can be determined by the quality of staff and it is therefore logical to expect that staff morale may impact on student satisfaction. Regardless of its impact on students, tracking morale helps management to identify problems faced by staff thus facilitating management intervention before problems cause greater dissatisfaction or impact on staff work performance. Measuring climate was therefore an area where I, as Dean, should focus attention.

The second antecedent was as part of the planning process for the Faculty. Rather than having a single, integrated Faculty Plan, the Faculty aimed to develop a suite of plans: a Teaching and Learning plan, a Research and Research Training plan, an International plan, and a 'Values and Resources' plan. The last planning document was to be an integrating one, identifying the agreed underlying values for the Faculty and the resources required to fund the other components. Ideally the 'values' component should have been completed first: to shape other strategies and to provide

a framework for the other components. Unfortunately, University timelines caused us to focus attention on the other plans first. Nevertheless, because planning is cyclical on nature, the 'values' component of the current plan will be of use in the next iteration of the Faculty plan and will provide the framework for future planning.

These two antecedents came together in this study of values in the Faculty of Health Sciences. As will be argued later in this introduction, values, climate and culture are intertwined and indeed some authors have argued that they cannot be distinguished. This chapter provides the background for the study of values in a university. In brief, the thesis reports a secondary analysis of data collected from staff in the Faculty of Health Sciences about their values and the extent to which they are exhibited in the *modus operandi* of the Faculty. One of the questions in that survey asks about a value of collaboration (*'Working together co-operatively and respecting each other').* This question, in particular, illustrates the link between issues of morale and climate and issues of values: staff answering negatively about whether this value is exhibited are also reflecting on issues of organisational climate.

Collegiality is often seen as one of the defining characteristics of the work environment in universities, and of academic staff in particular. Asking about whether the value of working together collaboratively is observed in practice can therefore be used to provide a measure of the collegiality of a workplace. Collegiality is of course affected by a number of factors, including aspects of the leadership and management, and analysing the results of this question again illustrates how this thesis will contribute to knowledge of relevance to me in my role as Dean.

The working environment of university staff

A satisfactory working environment is important for any employee. Many aspects of the environment can make a person's job and their working life a positive or a negative experience. Factors in the working environment can act to motivate and encourage a staff member or can demotivate. The support services provided can make a staff member's life easier or can hinder performance of a staff member's duties.

Universities are no different from any other organisation in this regard: the performance of academic and general staff will be affected by factors in their environment. Academic staff have a significant amount of control over their own working life and have significant flexibility with respect to the way their workday is

structured, and also the focus of their research activities. However, increasingly, the structure of the academic staff member's day is being regulated through industrial negotiations. At La Trobe University for example, Clause 28.3 of the Enterprise Bargaining Agreement provides that:

> Many academic staff who are engaged in teaching and research require additional flexibility, therefore, academic members of staff will be entitled to the equivalent of up to one day in every five working days for carrying out appropriate research work off campus. Full-time academic staff who require more than one day in every five normal working days to engage in research or other academic activities off campus will need to obtain approval to do so from the relevant Head of School.

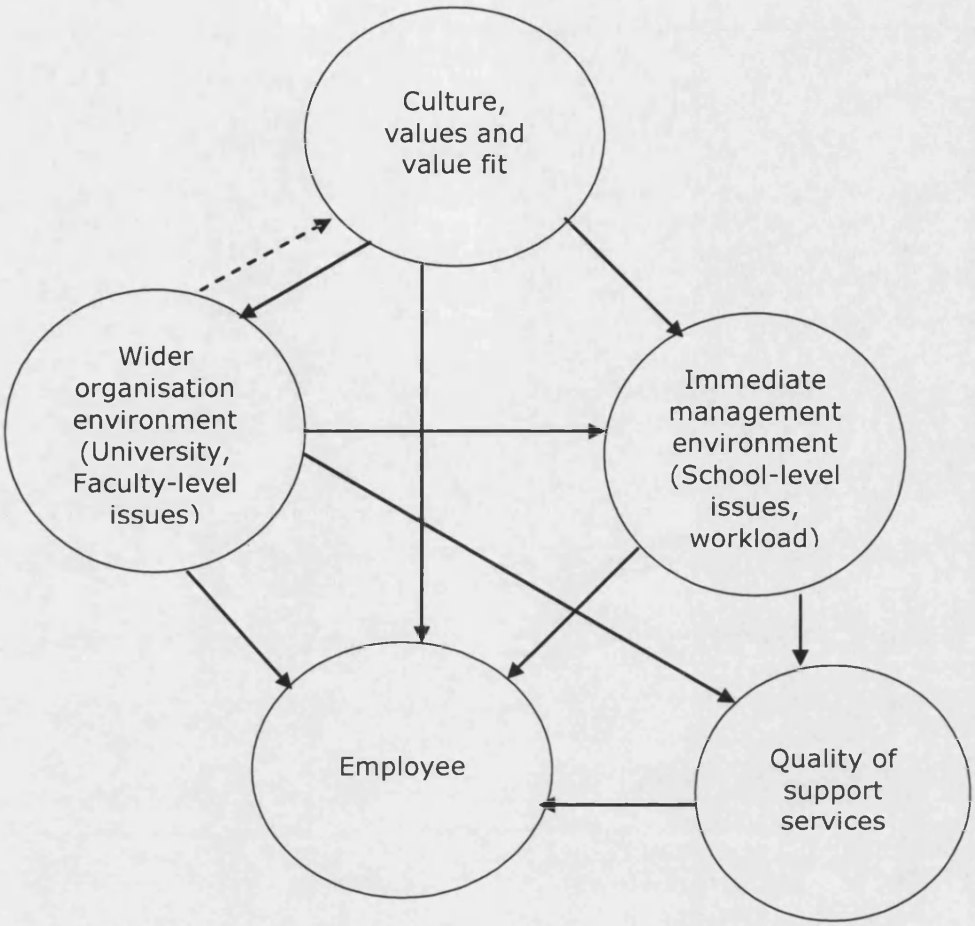
Working off campus is also now regulated by Occupational Health and Safety requirements. General staff are achieving greater flexibility with increasing numbers of part-time jobs and flexi-time arrangements.

Despite this flexibility and autonomy, the work environment still has a significant impact. There are a number of aspects of the working environment of staff at universities that can create harmonious work environments or the obverse.

Blackburn and Lawrence (1995), for example, undertook a very comprehensive study of U.S. academics. Their theoretical framework incorporated consideration of the environment (both environmental conditions such as finances and environmental responses such as levels of clerical support); attributes of the individual academic (demographic characteristics, discipline, career path, and the academic's values); aspects of the local work environment (eg. credibility of the department head and colleagues) and social contingencies (eg. illness).

In this present study, I am concerned with the impact of values and culture on staff (see Figure 1.1).

Figure 1:1 Organisational Environment Impacts on University Staff



This thesis is premised on the view that the culture of the organisation, its values and the value fit between the organisation and the staff member are increasingly important factors in facilitating a healthy work environment, a healthy work experience and motivating or de-motivating staff. A second important aspect of the work environment is the nature of the management and organisational relationships in the workplace. Here, two levels of relationships are important: those of the immediate work environment (the department, school, etc) and the management and organisational environment of the whole university. Thirdly, the support services available to a staff member are also important. The support services include access to employee assistance programs, library facilities, computer support services, etc. These various factors are inter-related, that is, the values of the organisation will shape the nature of the management and organisational relationships and both will shape the extent and nature of support services. The relationship can also be reflexive as value fit can be affected by purposive decisions of management be they at the immediate, School-level or in the wider university. As will be in seen in this literature review, the leadership of an organisation has a particular role in transmitting and transforming the culture of the

organisation (represented in Figure 1.1 by the dotted arrow). In this thesis, the focus is on one aspect of culture, specifically values.

Culture and values

The culture of an organisation has a profound impact on the functioning of the organisation, the way in which the organisation operates and the experience of the staff who work in the organisation (Ouchi and Wilkins 1985, Schein 1996). Organisational culture is all-pervasive and can be described in a number of ways. Fjortoft and Smart (1994) for example, described organisations in terms of clans or hierarchies. Finnegan and Gamson (1996) used differences in the 'culture of scholarship' to describe culture differences in four New England universities, and universities are replete with rituals and ceremonies (Manning 2000). Values can also be described at a number of levels for example, research vs. teaching orientation or ways of working together.

Hofstede (1990, 2001) has identified four manifestations of culture the first of which, values, defined as 'a broad tendency to prefer certain states of affairs over others' (Hofstede, 2001 p5). Values are invisible. Visible manifestations of culture occur through:

- Rituals ('collective activities that are technically unnecessary');
- Heroes ('persons ...who posses characteristics that are highly prized in a culture') and
- Symbols ('words, gestures, pictures and objects that carry ... meanings recognized as such only by those who share the culture').

Hofstede refers to the three visible manifestations as 'practices'. Organisational values are often determined by the founders of the organisation and/or shaped by subsequent leaders (who may become organisational 'heroes'). These values then affect current organisational members through shared practices (Hofstede 2001, p394).

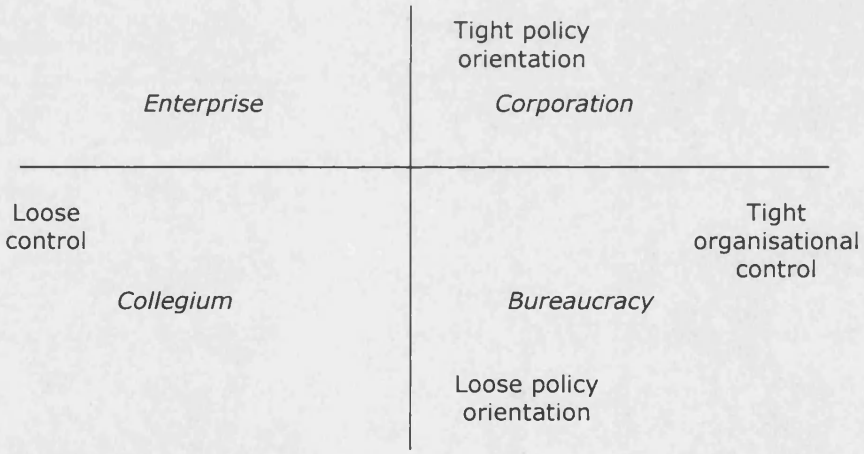
The importance of enduring or core values was highlighted by Collins and Porras (1998) following a major study of eighteen 'visionary' companies that were more successful than their comparators. They identified that amongst other differences, visionary companies emphasised and held true to a set of core values. These values varied from company to company (i.e. there was no 'right' set of values applying

across all companies) but in visionary companies these core values survived over successive leaders and through difficult financial periods. Values were reinforced:

- 'The visionary companies more thoroughly indoctrinate employees into a core ideology than the comparison companies, creating cultures so strong that they are almost cult-like ...'
- 'The visionary companies more carefully nurture and select senior management based on fit with a core ideology than the comparison companies'
- 'The visionary companies attain more consistent alignment with a core ideology – in such aspects as goals, strategy, tactics, and organization design – than the comparison companies' (Collins and Porras 1998 p 71)

Several dimensions of organisational culture have been identified. For example, McNay (1995) has suggested a model based on two dimensions: the extent to which a university has loose versus tight controls or rules and the relative emphasis on policy and strategy (see Lapworth 2004 and Middlehurst 2004 for further applications of this model). McNay's model yields four quadrants as shown in Figure 1.2.

Figure 1:2 Two-dimensional model of university cultures



McNay's model identifies four cultural types:

- An enterprise culture with an emphasis on the market-place, attention towards external opportunities and relationships with stakeholders;
- A corporate culture with a dominant senior management team;
- A collegium, with a decentralised organisation with an emphasis on individual freedom; and
- Bureaucracy dominated by rules, regulations and precedents.

A number of authors have suggested that universities in Australia are moving from a collegial to a managerial or enterprise culture (Marginson and Considine, 2000,

Coaldrake and Stedman, 1998). This is evidenced by a proliferation of senior management positions (deputy vice-chancellors, pro vice-chancellors) and a de-emphasis on collegial decision processes. Although vice-chancellors and their senior management teams have emphasised the benefits of the changes in university culture, academics exhibit considerable disquiet about the changes (Adams 1998) and the new 'corporate' culture is seen to be antithetical to 'traditional' academic values (Giroux 2002). Notwithstanding this, academics continue to value university employment and do not leave, even when they have the opportunity (Bellamy et al 2003).

External policy changes can affect the shape of an institution and this can also affect working life (Mahoney 1996, Yielder and Codling 2004). Dua (1994) studied academics at the University of New England that had recently amalgamated with two Colleges of Advanced Education. Thirty-two percent of his respondents reported "that the events related to amalgamation had produced too many changes in too shorter time".

The disquiet about these policy and organisational shifts amongst academics is not unique to Australia. Johnsrud (1996) argues

> that there are three broad concerns eroding morale of faculties: the attack on their professional priorities, their lack of confidence in an institution to protect their personal and professional interests, and the erosion of their quality of life.

Universities operate within a regulatory framework determined by government, with different countries utilising different mixes of regulatory instruments with different levels of intervention. Ouchi (1980) suggested that organisations can rely on three different types of control structures: markets, bureaucracies and clans. Clark (1983) adopted a similar structure when he postulated three distinct mechanisms for coordination of university activity: market, state and academic oligarchy. Ouchi argued that different control structures are more efficient in coordinating different types of work environments as categorised along two dimensions: performance ambiguity (the ability to measure outputs) and goal incongruence (knowledge of the transformation process). Mannion et al (2005) present the match of control structures to the environments as shown in Table 1.1.

Table 1:1 Efficient control structures and antecedent conditions

Ability to measure outputs	Knowledge of the transformation process	
	Perfect	**Imperfect**
High	Markets/ Hierarchies	Markets
Low	Hierarchies	Culture

Systems of control of universities through 'culture' ('donnish dominion' to use Halsey's (1992) term), were almost the *sine qua non* of university life. As Middlehurst (2004) points out:

> "The collegial image ... has exerted a powerful influence on the culture and functioning of academe even though many of its significant features are now more symbolic than real."

Up to about the 1960s, Australian university control structures were essentially based on a culture or via the 'academic oligarchy' to use Clark's terms. At the national level this was operationalised through a powerful semi-autonomous Australian Universities Commission. University internal control structures paralleled this with weak, often part-time Vice-Chancellors and strong academic control through powerful professorial boards. This predominant structural choice possibly reflected a perceived weak ability to measure key outputs (especially research quality), other than collegially, and the educational process for university was seen to involve a personal relationship between lecturer and student. This period was seen as the halcyon days of Australian university life and 'culture-based' systems of control became to be seen as the most legitimate and appropriate.

The external environment changes, however, and widening participation in universities, especially in the 1980s, led to changes in control structures with an increased emphasis on market-based external control mechanisms becoming increasingly evident, together with strengthened hierarchical control internally, weakening culture/clan or academic oligarchies. Recent changes to higher education policy in Australia have further strengthened markets and hierarchies at the expense of culture (Duckett 2004).

Elliott and Crossley (1997) have argued that the external environment can impact on organisational processes for example, including the way in which quality is assured and demonstrated. Increasingly, quality management incorporates an emphasis on measurement and quantification as opposed to internalised professional standards. This can cause conflict within organisations. Governments, key players in the external environment, are increasing their focus on university decision-making processes and

governance structures that could affect the culture and *modus operandi* of universities (Tilley 1998, Lambert Report 2003).

However, it is probably not true that the external environment *determines* university culture. Volkwein et al (1998) studied the impacts of the regulatory environment of U.S. research and doctoral universities on administrative satisfaction. Their study controlled for state and campus characteristics. The study classified the 50 U.S. states into a "flexibility grid" in terms of the academic flexibility that was allowed to public universities within the state and the degree of academic flexibility and administrative flexibility. Their conclusion was:

> Our investigation finds little direct relationship between administrator satisfaction and most state and campus characteristics, including the regulatory climate ... if the external regulatory climate does influence satisfaction the inferences appear to be indirect and small.

In a later study, Volkwein and Zhou (2003) found that the broader political environment, not necessarily related to the regulation of a university (such as the political culture of a state), was associated with differences in job satisfaction. This suggests that the relationship between the external environment and job satisfaction is quite complex.

Various factors may mitigate environmental effects. In particular, leadership of the university has a role in interpreting the environment and mediating the pressures and emphasis of the external environment in terms of how they will impact on the university's culture, its internal environment and the work life of academics. Indeed Schein (1992 p1) suggests that 'the only thing of real importance that leaders do is to create and manage culture'. Bargh et al (2000) also highlight the importance of vice-chancellors 'engaging' with the 'fundamental values and ethos which underpins the operation of universities'; Weingartner (1999) suggests that academic administrators should act as role models in living out the ethos of the university. However, the leadership role itself is stressful (Johnsrud and Rosser 1999; Johnsrud et al 2000) and, indeed, Australian academic leaders may have more stressful roles than leaders in other countries such as the United States (Wolverton et al 1999; Wolverton et al 1999).

This shift in overall orientation and culture of an organisation may permeate all levels of the organisation and impact directly on the working life of academic staff. At the departmental level, the shift in orientation could be exhibited in deemphasising staff meetings and collective decision making processes and emphasising decisions by

heads of department/heads of school. The culture of the whole organisation may thus impact on and shape the culture of the department.

There is some dispute in the literature as to the extent to which organisational cultures are amenable to change. Two schools of thought have been identified: cultural pragmatism and cultural purism (Frost and Gillespie 1998). Cultural pragmatism suggests that organisational leaders can change organisational cultures. Cultural purism in contrast, regards the organisation and its culture as identical, the organisation and its culture are so enmeshed that it requires organisational redesign, merger, amalgamation or takeover to shift the culture. However, Frost and Gillespie also note that "most organisations have multiple cultures, interpretations of which vary". Thus, for example, different departments, faculties or campuses of a university could exhibit different cultures and that "members of different parts of universities or colleges may experience a culture in strikingly various and complex ways".

However, the greater the extent of agreement about mission or values, the greater the organisational effectiveness. Fjortoft and Smart (1994) studied 334 four-year colleges and universities as part of an analysis of organisational effectiveness. In their study, they measured achievements in student progress (eg, educational satisfaction, academic development) and staff and administrator satisfaction. They found that organisational culture itself (in their study, cultures were described as clan, ad hocracy, hierarchy and market) as well as the extent of mission agreement had an important impact on performance. The nature of the impact however, varied with the type of culture but:

> Institutions with high levels of mission agreement are perceived to be more effective than those with either medium or low levels of agreement in terms of students academic and career development, employment satisfaction of faculty administrators, smooth internal functioning and acquisition of resources from their external environments. This suggests the importance of building consensus in terms of how the collegiate community defines its mission (Fjortoff and Smart 1994 p. 441).

In a similar vein, Smart and St John (1996) also showed that the effectiveness of the four cultural types used by Fjortoff and Smart was enhanced if there was a closer alignment of management practices and cultural values of the organisation (Smart et al (1997) had similar findings).

Creating the culture and transmitting values

As Hofstede (1990, 2001) argued, values are one of the four manifestations of organisational culture. Organisational culture and values can be transmitted in many ways, for example, through leadership statements and/or through developing and agreeing a mission statement for the university (Mouritsen 1986). Statements of organisational values are becoming common in many organisations (Kabanoff and Holt 1996) and their use is recommended in popular business periodicals (e.g. Lencioni 2002). Clear value statements for public servants are assumed to facilitate integrating value considerations into public service decision making (Kernaghan 2003). Company value statements can aid in recruitment, especially if backed by statistical evidence of adherence (Highhouse et al 2002). Although the value base of universities is (still) different from for-profit businesses (Weingartner 1999), value statements can also be used as part of effecting change in universities. For example, Syracuse University developed and articulated five core values (quality, caring, innovation, diversity and service) as part of its restructuring program (Shaw and Lee 1997). Universities are complex organisations with multiple goals and so clarifying and promulgating realistic goal or value statements can be fraught (Patterson 2001).

The most powerful element of culture and its transmission is at the level of the department (referred to as the immediate management environment in Figure 1.1). and the role of departmental leaders is thus critical (Knight and Trowler 2000). Departments typically are created because of discipline cohesiveness and the every day work of an academic is linked to the other members of the department, especially with respect to teaching. Departments typically, like self-management teams in industry, "contain a high degree of decision making autonomy and behavioural control... and much greater emphasis is placed on control from within the group rather than control from outside" (Eckel 1998). Discipline culture will in some cases be stronger than institutional culture (Välimaa 1998), although disciplinary culture may affect different aspects of an academic's working life and impact less significantly on job satisfaction than organisational culture. There are significant differences between disciplines (Becher and Trowler (2001) pursuing the 'clan' metaphor to refer to different academic 'tribes') and Silver (2003) has argued that disciplinary culture can be so strong that it displaces university culture as a useful explanation of differences between universities. The culture of a department may be amenable to change through bottom-up strategies, if initiated by a cohesive and motivated group of staff (Thomas and Willcoxson 1998).

These differences in disciplinary culture are accompanied by variation in effective leadership styles across disciplines (Kekäle 1999). Similarly, different leadership styles are appropriate in different organisational cultures "whereas some cultures help an organisation cope with environmental changes, others can obstruct necessary adaptation to external changes" (Sporn 1996 p. 55). Sporn suggests that "by understanding and developing cultural conditions universities can become more competitive". Importantly, there is some tentative evidence that more positive departmental cultures can act to improve departmental performance: Ramsden (1994) finding a positive, albeit weak, relationship between a 'cooperative work environment' and measures of research productivity.

Organisational culture and job satisfaction

Because of the core nature of the culture of an organisation, it will impact on job satisfaction. Indeed it has been argued that satisfaction or 'climate' cannot be distinguished from organisational culture:

> Despite the large number of studies into climate, attempts to define the construct in a way that differentiates it from culture has proven problematic (Wallace et al 1999).

A more satisfactory approach has been adopted by Allen who suggested a distinction between climate and culture. He argued that organisational climate and the work environment is

> more shallow, forming more quickly and altering more rapidly ... Organisational culture... is more resistant to change as a result of short term variations in the environment (Allen 2003).

Oshagbemi (1996) reported that in the period 1981 to 1995 there were 843 studies of job satisfaction across a range of industries but only 42 of those were related to teachers and even fewer related to academics. However, there have now been a number of international studies of job satisfaction of academics, the most notable being that of Boyer et al (1994) that surveyed academics in 14 countries examining perceptions of student quality, professional activities and working conditions, including job satisfaction. This focus on 'professional activities', common to a number of studies of academics, again links culture and values to job satisfaction. The link between culture and job satisfaction can be seen in Johnsrud and Heck's (1998) model where the quality of working life is impacted by both professional priorities such as whether they have tenure, their role and the time they devote to academic life, and the

institution support including workloads, student support, and discriminatory practices of the institution.

Drawing on data from the Boyer et al (1994) study, Enders and Teichler (1997) have shown that there are significant differences in job satisfaction and working conditions in different countries. Enders and Teichler's study examined academics in Germany, England, The Netherlands, and Sweden, and contrasted those with Japanese and U.S. academics. They found significant differences in working conditions including resources available, research activities and funding and class sizes across the academics from different countries. Similarly, they also found differences in the positions in the hierarchy in the different countries. Cultural differences in organizations between nations have also been reported in other industries (Hofstede 2001).

Also drawing on the Boyer et al dataset, Lacy and Sheehan (1997) particularly focused on the Australian results and found differences in different disciplines ranging from 16.5% of engineering academics indicating satisfaction with prospects for promotion to 37.5% of humanities academics expressing satisfaction. Lacy and Sheehan developed five clusters of predictors of job satisfaction: atmosphere, research, teaching, administration and governance but they noted that "it is significant that almost 60% of the variance was not explained by the items contained in the models (predictors) used in this study". They suggested "this is indicative of the elusive intangible nature of job satisfaction and further illustrates the apparent difficulties in defining the concepts and examining its relationship with other factors". However, this may simply reflect a weakness in design of the questionnaire, for example, excluding questions that might have detected effects on satisfaction with promotion of perceived relative deprivation (Stouffer 1949, Runciman 1972).

Despite this pessimistic conclusion, many authors have found logical and consistent relationships in analysis of job satisfaction data. For example, Volkwein et al (1998) found that:

> The important and statistical robust finding in our study is the solid and consistent connection between every measure of administrative satisfaction and the human relations aspect of university administration and the personal work stress exhibits a consistently negative association of satisfaction and an atmosphere of teamwork exhibits consistently positive satisfaction.

Studying university work environments

There have been seven major Australian studies addressing aspects of the university work environment, particularly focussing on academic job satisfaction. Essentially these studies adopted similar approaches through developing one or more scales to measure the construct. The sampling frame for the studies included academics at one or more universities, and in one case was limited to Heads of Departments. A particular focus of these studies was academic job satisfaction. Table 1.2 summarises the methodological approaches of these studies.

Table 1:2 Recent Australian studies addressing academic work satisfaction

Paper	Sample	Questionnaire
Mahoney (1996)	▪ Random sample of all universities. ▪ 59% response rate (293 respondents).	▪ '4 page questionnaire'. ▪ 29 items about effect of recent university changes; perceptions of job satisfaction. ▪ No mention of pilot study.
Taylor et al (1998)	▪ 38% response rate (411 respondents).	▪ 50 questionnaires with items on quality; teaching; research; academic freedom; work experience including level of satisfaction. ▪ No mention of pilot study.
Wolverton et al (1999)	▪ 1,680 heads of department across all universities (Australian sample). ▪ 51% response rate.	▪ Amalgamation of previously validated instruments: Chair stress; inventory; role conflict and ambiguity questionnaire; Chair Tasks Inventory.
McInnis (1999)	▪ 2,609 academics, 38 universities ▪ 58.4% response rate.	▪ Replication of 1993 study. ▪ Focussed on workloads, levels of satisfaction, teaching and research activities.
Winter et al (2000)	▪ 319 academics, single university. ▪ 63% response rate.	"Academic Work Environment Study": ▪ 99 items ▪ 5 domains: role stress; job characteristics; supervisory characteristics; structured characteristics; sectoral characteristics. ▪ Pilot study at same university including 12 semi-structured interviews.

Dorman (2000)	▪ 489 academics, 28 universities ▪ 87% response rate	"University Level Environment Questionnaire": ▪ 42 items, 7 scales: academic freedom; concern for undergraduate learning; concern for research and scholarship; empowerment application; minimum conservatism; and work pressure ▪ Differences identified between university types; discipline; gender.
Bellamy et al (2003)	▪ 3,131 business academics at 38 universities. ▪ 42% response rate.	▪ Academic vocation (7 items) ▪ Factors affecting why become/remain an academic (13 items including salary, autonomy). ▪ Factors affecting work satisfaction (21 items including income, support services). ▪ No mention of pilot study.

Because of their singular focus on job satisfaction, these studies address only this one element relating to culture and values. Although a number of the questionnaires seek information about the values held by academics, values and culture *per se* are not the principal focus of the questionnaires.

The findings of these studies provide a relatively coherent picture of academics and their issues of concern. Adams (1998) has synthesised three decades of Australian research on academic staff perceptions (see Johnsrud (2002) for a synthesis of American studies). She reports that Australian academics hold a core set of values that are reported consistently across a range of studies. These values include a valuing of independence and autonomy, and of the opportunity to make a contribution to knowledge. Studies conducted later in the period she reviewed (1968 to 1996) identified that academics were becoming more concerned that administrations were becoming more managerial and academics were also expressing dissatisfaction with changes in the nature and volume of academic workloads.

Interestingly, all these studies have focussed on perceptions of *academic* staff, with no reporting of the values held by administrative staff.

A number of broad conclusions can be drawn from this review of the literature:

- Culture, including organisational values, can have a clear impact on job satisfaction.

- Values ought to be articulated in 'value statements' and adhered to over time and from the perspective of the staff member.
- There are many different ways of conceptualising and describing cultures and values.
- Academic staff are aware of value shifts that have occurred over the last decade and are concerned about this.
- There may be differences in values in different parts of an organisation.

But these conclusions from the published literature leave much unresolved. Academic studies of culture and values have primarily been large scale, cross-institutional studies. Although important, they speak only to one type of knowledge: that of the academic researcher. Practitioner knowledge is also important (Yeatman 1996, Mullen and Kaminsky 2000) but the published studies provide little guidance to the practising manager about values held by staff in his or her organisation. The literature also shows that adherence to values is important; this suggests that managers should invest in measuring that adherence, but unfortunately there is little in the literature to give guidance to a manager about efficient ways of doing this.

Aims of this study

This reflection of the gaps in the published literature further informed this study. As a professional doctorate, this thesis is to contribute to 'practitioner knowledge', from my point of view preferably knowledge relevant to me as a manager in the Faculty of Health Sciences. The aims of this study thus became partly to discover 'facts' to inform management about the extent of support for the Faculty's value statements and adherence to those values and partly to test hypotheses about those facts.

In particular, this study had five aims. The first two aims were about eliciting 'facts' on the current situation in the Faculty:

AIM 1. To measure and report on espoused values within the Faculty of Health Sciences at La Trobe University (with an expectation that a consultative process to develop value statements will yield high levels of support for those statements)

AIM 2. To measure and report on value adherence within the Faculty of Health Sciences at La Trobe University.

The literature leads us to expect differences in espoused values between different groups of staff, principally reported in terms of disciplinary differences (e.g. Becker and Trowler 2001). Although the Faculty of Health Sciences is relatively homogeneous, there are intra-Faculty differences (an issue discussed further in Chapter 3) and these differences may be reflected in differences in espoused values. Similarly, we would also expect differences between units with different work emphases, in the Faculty of Health Sciences context this would be seen in differences between research centres and schools. These expectations lead to an aim of testing whether these differences are detected in the Faculty:

AIM 3. To test the hypothesis that there will be differences in espoused values between the different Schools and between different types of organisational units (Schools vs research centres vs Faculty Office)

As indicated above, the current literature does not shed light on whether values are shared by academic and administrative staff, leading to a fourth aim:

AIM 4. To test the hypothesis that there will be differences in espoused values between different types of staff (academic vs administrative)

A number of authors cited above have identified the importance of leadership in affecting culture and values. Within the Faculty of Health Sciences the different organisational units (schools, centres) function with a high degree of autonomy and so it is logical to expect that this could lead to differences in perceptions of value adherence. This leads to a fifth aim:

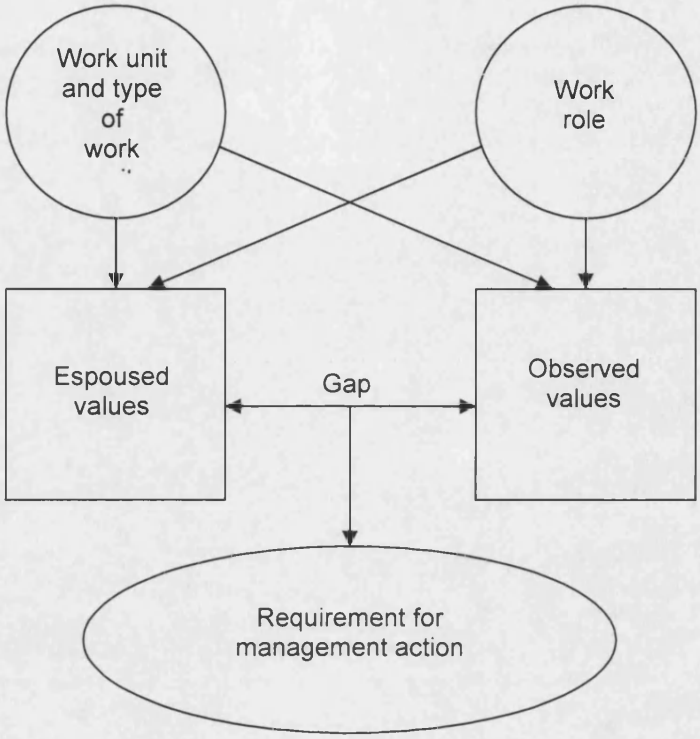
AIM 5. To test the hypothesis that there will be differences in value adherence between organisational units (reflecting the effect of different leadership, culture etc).

Staff may have different perceptions based on their experience in the University or their level of appointment and so these also factors need to be explored to assess whether analyses to test the above hypotheses should be standardised for these factors.

As noted at the beginning of this thesis, this thesis is for a professional doctorate designed to have relevance for me in my role as a higher education manager. It is my expectation that the findings derived from the aims identified will have direct relevance

for me as a manager in improving my understanding of the Faculty of Health Sciences at La Trobe University and identifying areas for further action. Figure 1:3 illustrates this relationship

Figure 1:3 Practice relevance of thesis framework



Aims 1 and 2 are about measuring and reporting on espoused values (Aim 1) and value adherence (Aim 2) in the Faculty. These aims are shown as the central boxes in the figure. The other three aims relate to the influences on the values and value adherence, summarised by an expectation that the type of work unit (Aim 3) and the work of the respondent (Aim 4) would be expected to influence both the identification with the value statements and also the value observance. Aim 5 identified a particular expectation that we may be able to detect differences between the organisational units in value observance (i.e. the work unit itself will have an impact).

Zeithaml et al (1990) have expounded a 'gaps model' for analysing service quality. This model, which underpins the widely used SERVQUAL questionnaire, which focuses on 'discrepancies or gaps that need to be closed to offer excellent service'. Based on this approach, what is critical from a management point of view is the extent to which there are differences between espoused values and observed values ('gaps' in Figure 1:3). The larger these differences, the more staff will be resentful or suffer low morale.

This thesis is predicated on the assumption that where significant differences are identified these differences should, *prima facie*, be interpreted as a cause for concern and provide a stimulus for management action to address the differences. The first step in management action should be to identify whether staff themselves believe that the differences warrant management attention; if they do, management needs to explore reasons for the differences.

The thesis overall has a focus on identifying the differences that occur within the Faculty, attempting to understand these differences, but with a particular interest in attempting to identify an agenda for action. This action orientation is reflected in the scope of the discussion in the results chapters, which gives priority to identifying practical implications of these findings. It is also highlighted in the concluding chapters of the thesis where academic explanations and implications are complemented by attention to the professional implications, as appropriate in a professional doctorate.

Structure of the thesis

The thesis is structured into three main parts, commencing with this introduction. Part I also incorporates a methodological chapter (Chapter 2) and a chapter on the context of the study, the Faculty of Health Sciences at La Trobe University (Chapter 3). Part II comprises the main body of the thesis and incorporates the results chapters: dealing with identification with the values (Chapter 4), and perceived adherence to the values in the immediate work unit (Chapter 5) and in the wider University (Chapter 6). This part also incorporates as Chapter 7 a special analysis of one school, Nursing and Midwifery, that was identified as aberrant in previous chapters. The final Part III provides the conclusion, recommendations and implications in two chapters. Supporting material is provided in Appendices.

In line with the requirements for the Doctor of Business Administration in Higher Education Management, Appendices are provided which incorporate "a critical account of their personal development over the DBA program" (Appendix 5) and "a briefing paper for management on precise conclusions and recommendations arising from the study" (Appendix 6, drawing on Conclusions Chapter 8).

Chapter 2: Methods

This chapter reviews ways in which values in organisations can be measured. It reports on how the Faculty of Health Sciences' values questionnaire was developed and the ethical issues associated with that. It also reports on the administration of the questionnaire and the response rate.

Research into culture and values, as with any research, can involve specific data collection for the purposes of the research (labelled by Hofstede (2001) as 'provoked') or can rely on pre-existing data sources (Hofstede labels this as 'natural'). Hofstede highlights an important second distinction in the study of culture as whether the focus is on 'words' or 'deeds'. These distinctions generate a two by two table of possible methodological approaches (see Table 2.1 from Hofstede, 2001 p5).

Table 2:1 Four available strategies for operationalising constructs about organisational culture

	Provoked	Natural
Words	• Interviews • Questionnaires	• Content analysis of speeches • Analysis of documents
Deeds	• Laboratory experiments • Field experiments	• Direct observation • Analysis of available descriptive statistics

All cells of this table yield valid and appropriate research approaches with different strengths and weaknesses. The distinction between 'words' and 'deeds' is a particularly important one for the study of culture and values as there may be an important difference between rhetoric and reality. Adams' (1998) synthesis of the Australian research showed that many academics disbelieve administrators' rhetoric about the importance accorded to teaching by the university. The surveys reviewed by Adams thus provide an example of 'words' being used to cast light on 'deeds'.

As the table shows, the study of deeds can involve analysis of the outcomes of resource allocation or other decisions as evidenced by organisational budgets and statistics. Study of 'words' can involve documentary analyses including analysis of

speeches or, in terms of 'provoked' studies, interviews and surveys of organisational staff or stakeholders.

'Provoked' data can be quantitative or qualitative, both methods having been used in the analysis of culture and values. Hofstede (2001) for example, based his conclusions on a major study of IBM employees. His data were drawn from two rounds of employee surveys (1967 and 1973) with more than 116 000 questionnaires being returned from respondents in 72 countries using 20 languages. The analytical approach was primarily quantitative distinguishing value orientations (such as 'individualism' and 'collectivism') derived from questions asking about the extent of agreement to statements such as:

- Competition among employees usually does more harm than good
- Company rules should not be broken – even when the employee things it is in the company's best interest
- Most employees have an inherent dislike of work and will avoid it if they can

Interestingly, values of Australian respondents were very similar to those of respondents from the U.S. For example, Australia ranked second only to the U.S. in emphasising individualism against collectivism. Whether Australian academics would exhibit the same value orientation as IBM employees is, of course, a moot point.

The Collins and Porras (1998) study, in contrast, is primarily qualitative identifying company cultures and values through documentary analysis and interviews. (The study also involved qualitative components such as analysis of profitability and market valuations). Qualitative studies, almost by definition, involve deeper analysis of a more limited range of 'subjects' compared to quantitative study.

The approach of this study

The study to be reported in my thesis will be primarily a quantitative study of 'words'. This (proposed) study could be described as either 'provoked' or 'natural'. Strictly speaking, the study is a secondary analysis of data that was not brought into existence for the purpose of this study; hence a classification of 'natural' is appropriate. On the other hand, the survey that will be analysed is an intervention or 'provoked' study, that is the purpose of the questionnaire that will be analysed as part of the thesis was

designed to elicit information about staff values. This is an issue that will be discussed further below in the context of ethical issues about the study.

As indicated in the previous chapter, the antecedents of this study lie in an interest in morale and the development of a 'values' component to the Faculty of Health Sciences' plan. Both antecedents support an approach that the development and analysis of values in this case should involve all staff: all staff are affected by the values and have the ability to contribute to development of a values statement. A commitment to involving all staff makes a quantitative methodology the preferred method of ascertaining data. A quantitative study can provide a 'snapshot' across the whole Faculty and give weight to responses from all staff.

The total number of staff in the Faculty is relatively small (fewer than 450 total academic and administrative staff), and the largest organisational unit within the Faculty (the School of Public Health) has only 82 staff. Although a sample survey would reduce average reporting burden on staff, the small numbers involved would mean that addressing all the aims identified earlier (especially those associated with identifying differences between sub-groups, 3, 4, and 5) would be impossible as it would be difficult to detect differences between subgroups with appropriate levels of power. Further, a sampling approach vitiates a goal of inclusiveness and involvement of all staff in the development of values and monitoring of value adherence. Accordingly, an approach involving a complete enumeration (100% sample) was adopted and a survey of all staff in the Faculty was developed.

Such a survey is a study of 'words' in Hofstede's terms. But, as referred to above, Adams (1998) has drawn attention to the distinction between administrator rhetoric and staff belief, the distinction between 'words' and 'deeds'. The survey therefore incorporates questions about adherence to identified values. Comparing staff members' values and the way in which they are operationalised can therefore provide a measure of value-fit in the organisation.

Quantitative studies of values and culture generally develop constructs (such as extent of autonomy) from the answers to specific questions about specific activities. Such an approach is required if the researcher is simply aiming to elicit values from respondents. In the case of this study, we were interested in testing whether staff agreed with particular value statements. Thus rather than developing a construct about emphasis on students from a range of separate item responses, we asked directly about support for a particular statement.

The Faculty of Health Sciences' values questionnaire

Strictly speaking this thesis reports a secondary analysis of data collected for another purpose. The survey of values was collected for Faculty management purposes and the analysis reported in this thesis is at greater length and depth than was required for Faculty management purposes. However, as Dean I took a lead role in the development and conduct of the survey. I had sole responsibility for the analysis and reporting of results for both management purposes and, of course, this thesis. As I have argued earlier, "management purposes" and the thesis are intertwined.

It is important to stress though that the development process for the survey was a collaborative one and changes were made to the design of the questionnaire as part of that process. In that sense the implementation of the survey is not necessarily as I might have wished if I were totally autonomous in this regard. But an implicit aim of the whole process was to build staff commitment to the values statements and so the participation and subsequent changes in survey design served an important purpose. To some extent the development of the survey could be regarded as a separate qualitative research exercise involving elements of action research.

Whyte et al (1991) characterised participatory action research as a situation where

> some of the people in the organisation or community under study participate actively with the professional researcher throughout the research process from the initial design to the final presentation of results and discussion of their action implications

As indicated in Chapter 1, one of the antecedents of this study was the need to develop a 'values' plan/statement as part of the Faculty planning process. Plans are more likely to be supported and implemented if their development involves a participative process (Forester 1989; Mintzberg 1994; Friend and Hicking 1997) and certainly the other components of the Faculty plan have been developed in a participative way, albeit with strong leadership direction.

Typically, planning in the Faculty has involved first drafts and/or frameworks being developed by a leadership group (either within the Faculty office or involving Heads of School). Subsequent stages involve ever widening consultation, first with Heads of School if they have not been involved in the initial stage and then to all staff via regular School staff meetings. It is critical to the integrity of these processes that staff

experience of these processes is that generally adequate time is allowed for consultation and that changes occur as a result of the consultations.

This same process was followed in the development of the draft Faculty values statement and, following Whyte et al's characterisation, in could be regarded as participative action research. As will be reported later, summary results from the survey were reported back to Heads of School meetings and often to staff meetings with the aim of raising awareness of the issues involved and consolidating support for the values statement.

Action research is also characterised by a cyclical process involving planning and reflection (McNiff and Whitehead 2002). Such an iterative process was followed to develop the Faculty of Health Sciences' values questionnaire. La Trobe University has not adopted a values statement, nor has any other Faculty within La Trobe developed such a statement, and so the Faculty of Health Sciences values statement needed to be developed *de novo*. An initial list of possible values was developed by the Faculty executive (Dean, Deputy Dean and Registrar). The initial list (together with subsequent modifications) is shown in Table 2.2.

Table 2:2 Evolution of Faculty of Health Sciences' values questionnaire

Initial draft	Following consultation with Heads of School	Final questionnaire as agreed following consultation with staff in schools
• Serving our students/student-centred approaches (?)	• Putting students first	• Putting students first
• Working together co-operatively	• Working together co-operatively	• Working together co-operatively and respecting each other
• Making a contribution to health and health care	• Making a contribution to health, health care and society	• Making a contribution to health, health care and society
• Excellence in teaching and research	• Excellence in teaching, research and scholarship	• Excellence in teaching, research and scholarship
• Intellectual freedom and academic integrity	• Intellectual freedom and academic integrity	• Intellectual freedom and academic integrity.
• A working and learning environment which acknowledges and respects cultural and linguistic difference	• A working and learning environment which is safe and in which there is respect for each other and diversity is valued	• A safe working and learning environment
• A sustainable environment.	• A sustainable environment.	

The initial list was informed by the Faculty mission statement, and the (implicit) values of the Faculty executive. The list was presented to the regular meeting of Heads of School ('Faculty Development Committee') and modified there. The list was then released for wider consultation with staff. This involved consideration over a two-month period within Schools and report back to the Acting Dean of the Faculty. The consultation period resulted in further amendments to the list.

If consultation is to be meaningful then it should have the possibility of leading to changes in the initial proposals. Such was the case with the proposed values statement. There were three major changes as a result of staff consultation:

1 The second value statement was clarified and refined to elaborate the concept of 'cooperation' to highlight 'respecting each other'.
2 the sixth value statement was shortened, eliminating the reference to diversity
3 the final statement, about environmental sustainability, was eliminated.

The changes to the second and sixth statements need to be seen together: the concept of 'respect' was added to the second and deleted from the sixth. The final list was endorsed by the regular meeting of Heads of School and used as the basis for the Faculty values questionnaire as distributed.

The final questionnaire had four main components, the first three asked questions about endorsement of the agreed values list and about the extent to which the values are adhered to or observed at School or university level. These questions had forced-choice responses in a 5-point Likert scale format. There were at least three potential organisational levels that impinge on staff and for which information about value adherence might be sought. The first is the level of the immediate organisational unit, the School or department (only two Schools were subdivided into departments: Public Health and Human Biosciences). As Knight and Trowler (2000) point out, this is the level that has the strongest role in transmission of organisational culture. The top level is the university as a whole, values and culture at this level clearly impinges on departmental/School culture. Occupying the interstitial space at the intermediate level is the Faculty which, to some extent, can create its own culture and mediate the effects of university culture on Schools and staff.

Logically questions about adherence to espoused values could have been asked about each level of the organisation. However, it was decided to ask questions only about the immediate work unit and the University level for two reasons. First, it was thought

that most staff in the Faculty would not be able to distinguish easily between the performance of the two supervisory levels of the organisation as they would not necessarily have experience of working at these levels of knowledge of what decisions were made at the two different levels. Secondly, pragmatically, the aim was to minimise the length of the questionnaire and eliminating one level eliminated six questions (one about value adherence of each of the final six value statements).

The fourth component of the questionnaire asked questions about impediments that inhibit value adherence in the work unit. Responses to these questions allowed free text responses that were coded into clusters by two people (one being the author). Differences in allocated codes were discussed and a single code for each concept assigned.

Descriptive questions about respondents were also asked to allow identification of School, type of staff (and aggregated level) and length of service in the University.

The consultation process also led to changes in the design of the data collection instrument. Originally the first question, about importance of the espoused values, was structured to require respondents to allocate a total of 100 points across the various value statements, thus forcing consideration of relative importance. This approach was deemed too complex and replaced by the Likert scale used for the questions about value adherence.

A critical decision in the development of the questionnaire was whether to circulate the questionnaire to both academic and administrative staff. As was indicated in Chapter 1, previous studies of values in university settings have focussed on the values of academic staff only. There are a number of reasons for this, including that core work of a university (teaching and research) is normally shaped by academics and these core work tasks fulfil a large proportion of an academic's day. In contrast, the work of administrative staff is to some extent context independent: financial managers and personal assistants could be undertaking the same type of work in a range of settings outside academia.

I chose to survey administrative staff for two main reasons. First, the work of the administrative staff is essential to the smooth operation of the School, Faculty and University. Students have a great deal of interaction with administrative staff and the attitudes, work styles and behaviours of administrative staff can influence student perceptions of their university experience.

Secondly, inclusion of administrative staff also had a symbolic value: emphasising that administrative staff are part of the Faculty and attempting to reduce the perception of differences between academic and administrative staff. This is not to say that some of the values expressed in the values statements would not have more resonance with academic staff than administrative staff. Indeed differences between academic and administrative staff in relevance of the values statements were hypothesised (Aim 4).

Ethical issues

There were two stages in the consideration of ethical issues relating to the Faculty of Health Sciences' values questionnaire. The first was associated with the design and distribution of the questionnaire. Although the questionnaire was developed for a management purpose, the meeting of Heads of School (Faculty Development Committee) which finalised the questionnaire, gave its approval subject to the questionnaire being approved by the Faculty Human Ethics Committee. (The structure ethics approval at La Trobe University is that Faculty Human Ethics Committees are sub-committees of the University's Human Ethics Committee. The Faculty's Human Ethics Committee is therefore not administratively responsible to me as Dean, nor to the Faculty Board.) Faculty Human Ethics Committee approval thus represents an independent approval for the distribution and collection of the data.

The questionnaire was approved by the Faculty Human Ethics Committee but in so doing removed a number of identifying questions (e.g. gender of respondents). Identifying questions about work unit, classification and length of time employed in the University were the only classificatory questions retained.

The second element of ethical consideration relates to the use of data collected for one purpose (management purposes of Faculty) for another purpose (submission of this thesis). As was argued above, these two purposes are closely interrelated and the thesis is used to inform and improve my performance as Dean. However, the setting for this study is the Faculty of Health Sciences at La Trobe University where I am Dean. Although the questionnaire was finalised and the first round distribution occurred while I was on an Outside Studies Program ('sabbatical leave') from the University, any study for which I am responsible that involves staff of the Faculty creates an ethical issue relating to power relations and heightens ethical concerns

about confidentiality. Participation in academic research by staff should be voluntary involving informed consent. However, the survey that is at the core of this thesis was brought into existence for an administrative purpose, not directly related to this thesis.

Multiple roles of the researcher are common in management research (Gummesson 1991) and I had two roles in the development and study of values in the Faculty: as the Dean who leads the planning effort and as a researcher. The two roles inform each other and knowledge from the 'Bath' research perspective, including thinking about values, informs my decisions as Dean. Because it is the focus of a thesis, the analysis of the survey was more extensive and rigorous than if it was only analysed for management purposes.

As Dean I have taken a lead role in developing the survey described above and, although the survey has an independent existence separate from this research, my reading of the literature for the purpose of this thesis informed the approach and design of the survey. Nevertheless, the survey would be undertaken regardless of whether it also relates to this thesis so the proposed research is thus secondary analysis of data collected for another purpose.

This does not, of course, vitiate any ethical concerns; rather the additional ethical concerns become ones of obtaining independent approval for access to the data for this new purpose. Accordingly approval was sought and obtained from the University Human Ethics Committee to use the data from the values survey in this thesis.

Questionnaire distribution and response

Finalisation of the questionnaire and the initial distribution occurred while I was on leave. It was distributed by a broadcast email to all staff with a cover letter signed by the Acting Dean (see Appendix 1 for cover letter and questionnaire). Responses were requested to be sent to the Personal Assistant to the Faculty Registrar either electronically or, if stronger protection of confidentially was desired, by internal mail. No record was kept of method of transmission of response nor, in the case of transmissions by email, was any record kept of the name of the originating staff member. The methods of distribution were designed to ensure that the anonymity of staff was, as far as possible, protected. In only one case did a member of staff raise the question of anonymity. This issue was raised in response to the third reminder

(see following paragraph) and indicated that a reason for non-response was concern about anonymity.

At the time of the initial distribution the Faculty had 444 staff (297 academics, 147 administrative). The initial questionnaire distribution led to a response rate of 16% for academics and 19% for general staff, a second round reminder increased total response rate to 32%, a third reminder (sent to Schools/Centres with low response rates) yielded a few further questionnaires bringing the total response rate to 39%, a total of 169 questionnaires were returned. The pattern of responses across Schools and type of staff is shown in Table 2.3 and in more detail in Appendix 2, which also includes cross-tabulations of responses to the classificatory questions relating to length of time employed at La Trobe University or its predecessors.

Table 2:3 Number of staff and response rate to Faculty values questionnaire

School	Academic Staff		General Staff		Total
	Number	% response	Number	% response	% response
Human Biosciences	39	35.9%	13	61.5%	**42.3%**
Human Communication Sciences	21	33.3%	13	23.1%	**29.4%**
Social Work and Social Policy	20	35.0%	7	28.6%	**33.3%**
Orthoptics	6	50.0%	1	100.0%	**57.1%**
Occupational Therapy	27	29.6%	6	50.0%	**33.3%**
Public Health	62	32.3%	21	38.1%	**33.7%**
Physiotherapy	24	33.3%	7	28.6%	**32.3%**
Nursing	45	37.8%	26	30.8%	**35.2%**
Australian Research Centre for Sex, Health and Society	11	45.5%	5	20.0%	**37.5%**
Centre for the Study of Mother's and Children's Health	13	61.5%	2	0.0%	**53.3%**
Australian Institute of Primary Care	19	26.3%	6	33.3%	**28.0%**
Bouverie	0		20	10.0%	**10.0%**
Information Services Unit	0		9	44.4%	**44.4%**
Faculty Office	4	50.0%	11	72.7%	**66.7%**
TOTAL	**291**	**36.4%**	**147**	**36.7%**	**38.6%**

Although a final response rate of 39% is not ideal, it is similar to the response rate in two published studies on academic work satisfaction (38% in Taylor et al 1998; 42% in Bellamy et al 2003). Further follow-up to increase the response rate was not undertaken partly because of the low yield from the third round follow up (7% increase in response rate compared to 86% increase following second round follow-up). It was also felt that additional follow-up requests (which because non-respondents could not be identified had to be sent to all staff) might appear to be harassment by the Dean and undermine support for the process.

Because of the structure of the Faculty there are some quite small administrative units. For example, the School of Orthoptics has six academic and one administrative staff. Even though there was a 57% response rate in that school, this still represents the views of only four members of staff.

Some of the larger Schools and Centres had low response rates. For example, The Bouverie Centre, which is a clinical centre providing direct family therapy as well as undertaking the traditional academic functions of teaching and research, has 20 staff only two of whom responded. Similarly, the School of Human Communication Sciences had an overall response rate of 29.4%.

These small numbers and lower percent response rates means that care will need to be taken in the analysis of the results. In particular there may not be sufficient statistical power to identify differences between schools. Similarly, the very small numbers of responses for some schools increases the likelihood that the respondents are not a random sub-sample of the school as a whole and thus care also needs to be taken in ascribing differences in these circumstances. Emphasis will therefore be placed in the thesis on the more robust analyses where the numbers are much greater, for example, comparing academic and administrative staff in total and between schools and centres in total.

It is recognised that a low response rate causes difficulty in interpretation as non-respondents may think differently from respondents (Dey 1997, Gorard 2001). Unfortunately there is no way of testing the extent to which this applies in this study. The results presented in subsequent chapters are not adjusted to take account of differential non-response rates.

Chapter 3: The Faculty of Health Sciences at La Trobe University

This chapter describes the setting for this study: the Faculty of Health Sciences at La Trobe University. It provides information on the history and current configuration of the Faculty and the University.

La Trobe University is one of 38 publicly supported universities in Australia. Established in the 1960s, it has grown through a series of amalgamations to become a moderately sized university in the Australian context. The Faculty of Health Sciences is one of five faculties within the University.

Organisational antecedents of the Faculty

The Faculty of Health Sciences at La Trobe University is the historical successor of a number of independent training schools established for the allied health professions in Victoria. This history of autonomous operation of separate disciplinary preparation is an important influence on the way in which the Faculty operates today.

Health sciences education in Victoria was originally conducted by separate profession-specific schools: the Victorian School of Speech Therapy (known in its final form as the Victorian School of Speech Science), the Victorian School of Occupational Therapy and an educational program for physiotherapists eventually known as the Victorian School of Physiotherapy. These programs had emerged in the first half of the 20th century (eg. physiotherapy in 1908; speech pathology in 1945; occupational therapy in 1948). They were established under the auspices of the relevant professional association and/or registration board, based in hospitals and supported financially by the then Victorian hospital funding authority, the Hospitals and Charities Commission. In the late 1950s and early 1960s there was increasing recognition of both the emerging capital requirements for these schools and the merit of co-location for the programs. In 1966 the three schools were co-located at "Lincoln House", the former Davies Co-op building near Lincoln Square in Carlton, purchased for this purpose by the Victorian Department of Health.

Contemporaneously with this relocation, a Commonwealth Government inquiry (known as the Martin Committee) that reported in 1964, recommended a major reshaping of Commonwealth interest in higher education including financial support for non-university tertiary education institutions, known generically as "Colleges of Advanced

Education" (Davies, 1989). Colleges of advanced education were to be more "vocational" than universities, with a greater focus on teaching (and correspondingly less focus on research) than universities. The Martin Committee's conception of colleges of advanced education was based on the then-existing technical colleges that had a strong basis in engineering – a recognised tertiary discipline. The colleges of advanced education were the second part (with universities) of the "binary" system of education. Much of the discussion about colleges of advanced education focussed on technical colleges and institutes of technology, but subsequently teachers' colleges were absorbed within the college of advanced education system. Following the Martin Committee's report, the Commonwealth Government commenced funding colleges of advanced education.

In 1967 the three health sciences schools located at Lincoln House, were recognised as colleges of advanced education in the new system, even though they did not fit the traditional technological mould. Organisationally they each became affiliated with the Victoria Institute of Colleges, the State umbrella body that was responsible for accrediting degree and diploma programs in Victorian colleges of advanced education. In addition to the three therapy schools, a School of Medical Record Librarianship was also located at Lincoln House from 1972, although this program was not initially recognised as an Associate Diploma by the Victoria Institute of Colleges until 1973 (Ell, 1984).

The Victoria Institute of Colleges was keen to rationalise colleges of advanced education throughout Victoria, including the specialist therapy colleges, and advocated a merger of those colleges. In its annual report in 1974 it acknowledged that "because of the tradition and independence that each college proudly carried and because of inter-professional rivalries, this was not an easy task". However the merger did occur in December 1972 by Order in Council of the Government of Victoria, with the creation of a new college of advanced education, Lincoln Institute of Health Sciences. A similar development had occurred in New South Wales with the creation of a specialist health professional college, Cumberland College of Health Sciences.

The leadership of the new Lincoln Institute was keen to expand the scope of the Institute, but this was opposed internally, at least in part because proposed new courses in medical records, prosthetics and orthotics, and orthoptics were seen as having "a status lower" than existing programs (Radford, 1993), possibly as they were to be classified as Associate Diplomas rather than the fledgling degree status of the original disciplines.

Internal restructure of Lincoln Institute of Health Sciences consolidated the teaching of biological sciences and behavioural sciences in two "departments" servicing the three professional schools. These two departments were the predecessors of the Faculty of Health Sciences' Schools of Human Biosciences and of Public Health, the latter being a merger of *çi-devant* Schools of Behavioural Health Sciences and of Health Systems Sciences.

Lincoln Institute grew by subsuming other distinct health professional programs: the Victorian Training School for Medical Record Librarians in 1974 and the School of Orthoptics of the Royal Victorian Eye and Ear Hospital in 1975. Following discussions with the Repatriation Commission, the Lincoln Institute established a diploma program in prosthetics and orthotics in 1976 that replaced a course provided by the Commission.

A major expansion of Lincoln Institute occurred in 1977 when it merged with the College of Nursing (Australia), also a college of advanced education affiliated with the Victoria Institute of Colleges. The College of Nursing had been established in 1949 to conduct diploma programs for registered nurses and over time developed a range of postgraduate programs. In 1974 it became one of the first colleges of advanced education in Australia to offer a diploma for general nurse registration. Lincoln Institute also established training programs for podiatry in the late 1970s. The growth in size of Lincoln Institute meant that it soon outgrew Lincoln House and it acquired additional buildings in the surrounding area. It also established a second campus in Abbotsford that at one stage was planned to accommodate all of the Institute's programs.

The binary divide in education where colleges of advanced education were not funded to perform research and were not allowed to offer doctoral programs was under increasing pressure during the 1980s as the major institutes of technology sought university status. Many of the institutes of technology wanted (and eventually achieved) university recognition, essentially in their contemporary form. Lincoln Institute pursued an alternative strategy, seeking to merge with existing universities. A formal "statement of intent" to merge was negotiated with La Trobe University in 1981 (Gamage, 1992). However, the merger process was long and protracted and negotiations were not consistently carried out after signing the statement of intent; Lincoln Institute also flirted with merger with RMIT at this time. La Trobe's interest in the merger was to complement its liberal arts and sciences focus with a strong professional school, Lincoln to achieve university status on favourable terms (in

advance of a possible forced merger) and to improve its physical facilities. In 1988 Lincoln Institute was successful in reaching agreement to merge with La Trobe University, becoming the tenth School of that University as the Lincoln School of Health Sciences.

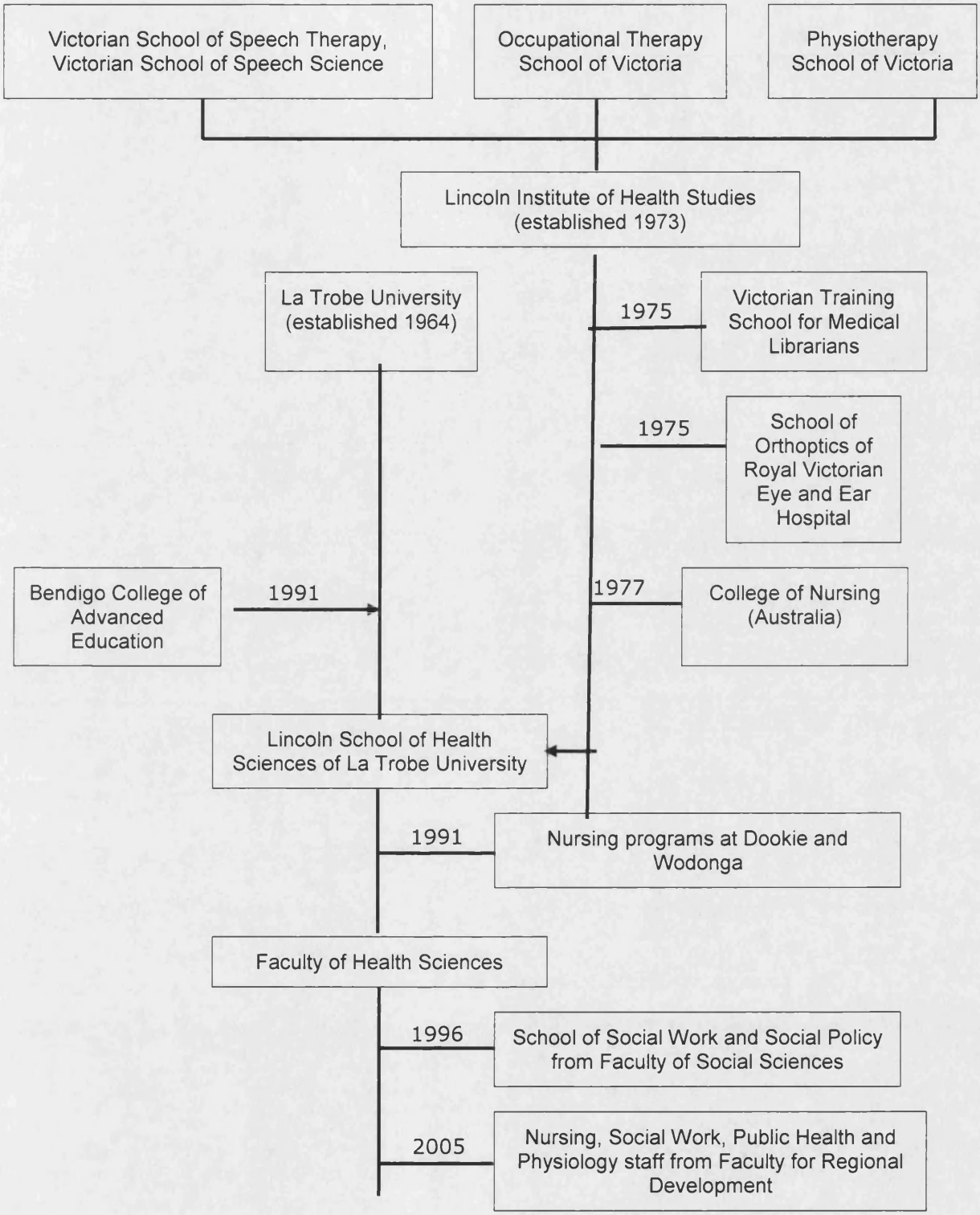
Shortly after the merger, several Lincoln School departments were relocated to the Bundoora campus of the University. The School continued significant teaching operations on three sites (Bundoora, Carlton and Abbotsford) until additional facilities were completed on the Bundoora campus in 1997. A near-city presence was retained through lease of a building at the Victoria Market.

The Lincoln Institute/La Trobe merger occurred prior to a national program of rationalisation of tertiary education led by the Commonwealth Education Minister, John Dawkins. As part of these national mergers, nursing programs conducted at Dookie and the Wodonga Institute of Tertiary Education were absorbed into the Lincoln School in 1991. Bendigo College of Advanced Education also merged with La Trobe University at this time (initially as the La Trobe University College of Northern Victoria) but the health sciences programs conducted in Bendigo remained organisationally separate from those administered through the then Lincoln School of Health Sciences.

A University restructure in 1996 led to the creation of the Faculty of Health Sciences, essentially based on the Lincoln School of Health Sciences but with the addition of the University's social work program that eventually became the School of Social Work and Social Policy of the Faculty. On 1st January 2005 the Faculty absorbed the Nursing, Social Work, Public Health and Physiology and Anatomy staff from the former Faculty for Regional Development (based at Bendigo) as part of a further University restructure.

Figure 3.1 summarises this historical evolution.

Figure 3:1 Historical evolution of Faculty of Health Sciences, La Trobe University



La Trobe University

La Trobe University was the third university established in Melbourne, following the University of Melbourne and Monash University. La Trobe was founded in response to an Australia-wide recognition of the need to expand significantly provision of university education. It was formally established by Act of the Victorian Parliament in 1964 and admitted its first students in 1967. In common with the other 1960s universities in Australia, it was influenced by post-War English universities, in particular Keele University, that in turn influenced the English universities founded in the 1960s (Green, 1969).

The Australian 1960s universities (La Trobe, Macquarie University in Sydney and Flinders University of South Australia) all attempted to challenge the established orthodoxy of university structure and function. At La Trobe the initial plans for the university followed Keele in proposing a residential university, with an organisational structure based on interdisciplinary schools rather than traditional faculties and departments. Eschewing the faculty-department structure was supposed to lead to greater flexibility and inter-disciplinarity (Marshall 1979, 1981). However, early in the University's career both the residential nature and the emphasis on a flexible non-departmental structure broke down (Henry 1971, Gregory 1989). The concept of a significant residential community was never endorsed by the Commonwealth government university funding body (Australian Universities Commission) and so only three of the planned ten residential colleges were built, and a central student union was developed. Departments evolved within schools along traditional disciplinary lines and interdisciplinary teaching became the exception rather than the rule.

A significant proportion of the students in the early years were students bonded to teach in the Victorian Education Department and the early University had a strong emphasis on humanities and the social sciences. La Trobe University was a centre of student radicalism in the late 1960s (York, 1984) and established a reputation as a radical, liberal arts University.

When Lincoln School of Health Sciences became the tenth school of La Trobe, this significantly changed the balance of the University and provided the first expansion into professional courses for the University.

La Trobe University today

La Trobe is one of 38 publicly supported universities in Australia. Table 3.1 shows some comparative data about Victorian universities (data on all universities not shown because of space).

Table 3:1 Comparative performance indicators for Victorian Universities

	Students (2000)	International students as a percentage of all students (2000)	Research quantum as a share of Commonwealth Government grant % (1999)
Deakin University	25,668	8.5	1.5
La Trobe University	20,424	8.7	4.3
Monash University	41,648	21.3	7.5
Royal Melbourne Institute of Technology	30,962	29.2	2.6
Swinburne University of Technology	12,105	15.2	3.0
The University of Melbourne	33,362	14.7	8.7
University of Ballarat	4,523	8.6	1.1
Victoria University of Technology	17,178	15.5	1.7

Source: http://www.dest.gov.au/highered/statistics/characteristics/characteristics.xls accessed 13 December 2004

La Trobe is a mid-size university, around half the size of Victoria's largest university, Monash University. In terms of internationalisation it is at the low end of the range of international students as a percentage of all students. Research activity is presented using the "research quantum" that, in 1999, was a Commonwealth payment to universities based on research income. Using the research quantum measure, La Trobe is the third most active research university in Victoria, behind the University of Melbourne and Monash University. Both these latter universities have very large medical schools that assist them in gaining research income. La Trobe thus can (and does) present itself as an active research-based university.

La Trobe is relatively active in health professional education. Table 3.2 shows the universities with the 10 largest enrolments in health sciences in Australia.

Table 3:2 Comparative university activity in health professional education, 2003

	Number of EFTSU enrolled in health courses	Total University EFTSU	Health EFTSU as a percentage of total EFTSU
The University of Sydney	6,370	36,640	17.4%
The University of Queensland	4,179	29,391	14.2%
La Trobe University	3,966	20,664	19.2%
The University of Melbourne	3,391	32,869	10.3%
Curtin University of Technology	2,985	24,512	12.2%
Monash University	2,958	38,833	7.6%
University of Western Sydney	2,513	25,965	9.7%
University of South Australia	2,446	21,384	11.4%
Queensland University of Technology	2,302	28,187	8.2%
The University of Newcastle	2,230	17,401	12.8%

Source: Derived from http://www.dest.gov.au/highered/statistics/students/03/student_tabl's/tabl's/'Tbl 40'!A1 Accessed 13 December 2004

It can seen that La Trobe has the third largest health science enrolment of all universities, and is the largest provider of health sciences education in Victoria. Almost 20% of La Trobe's enrolment is in health professional courses, a higher proportional enrolment compared to any of the other universities in the table.

The relative size of health professional education at La Trobe has impacts both within and without La Trobe University. Inside the University, the Faculty of Health Sciences is seen as a growing, relatively large, Faculty. In contrast to other Faculties in the University, the Faculty has strong student demand and is easily able to recruit and retain students. It is recognised across the University that the Faculty has been transformed over the decade and is regarded throughout the University as a very positive asset for the University.

Outside the University, the relative size of La Trobe University contribution to health science education is not so well recognised. La Trobe does not have a medical school

and health professional education in many policy contexts is dominated by issues relating to medical education (for example, when the Commonwealth government announced the development of Schools of Rural Health, a requirement was that they be based within universities with medical schools). Although La Trobe University has a larger commitment to health professional education than the two Victorian universities with medical schools (University of Melbourne and Monash University), the universities with medical schools have substantially more visibility within hospitals. As a consequence of the relatively secure place within the University and the relatively disadvantaged place outside the University, much of my focus as Dean has been in ensuring La Trobe's visibility in health policy in Victoria and with hospital managements.

The place of health sciences in La Trobe University today

In 2004 the Faculty of Health Sciences was one of five faculties of the University, the others being the Faculties of Humanities and Social Sciences; Law and Management; and Science, Technology and Engineering and the Faculty for Regional Development, the latter being a multi-disciplinary faculty based in the regional city of Bendigo. (The Faculty for Regional Development was dis-established on 1st January 2005 with the existing Faculty programs being assigned to the appropriate disciplinary Faculty. A new Faculty of Education was established with its Faculty Office in Bendigo).

Table 3.3 shows the number of Equivalent Full-time Student Units (EFTSU – the Australian measure of student load) in each of the Faculties of the University in 2004.

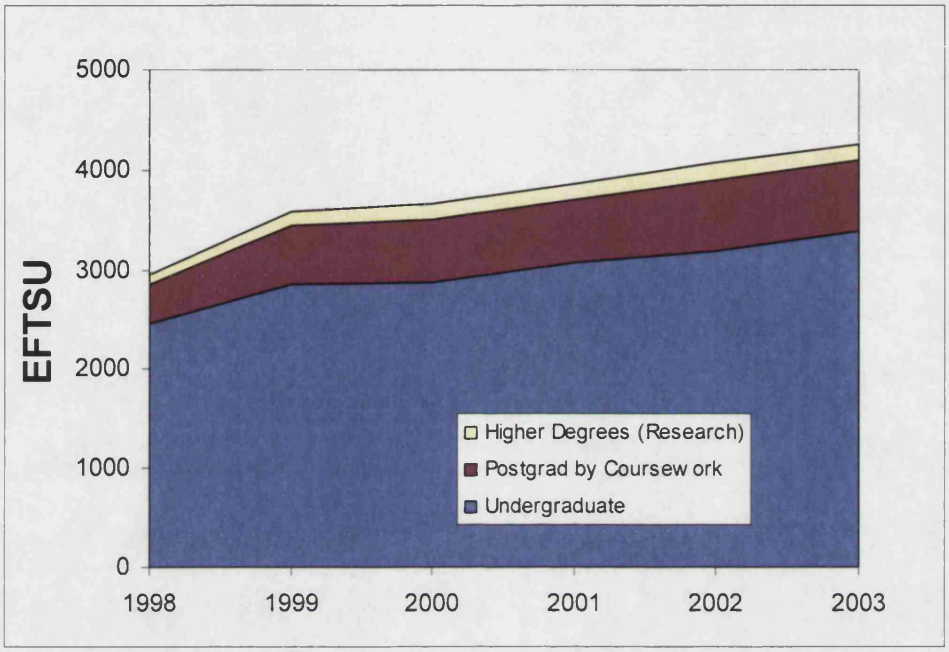
Table 3:3 Equivalent Full-time Student Units by Faculty, La Trobe University 2004

	EFTSU
Health Sciences	3,427
Humanities and Social Sciences	3,401
Law and Management	3,937
Science, Technology and Engineering	2,671
Regional Development	3,179
Total	**16,615**

The Faculty of Health Sciences is on a growth trajectory. Student load has increased by about 30% in the last five years (see Figure 3.2). This growth is across all types of

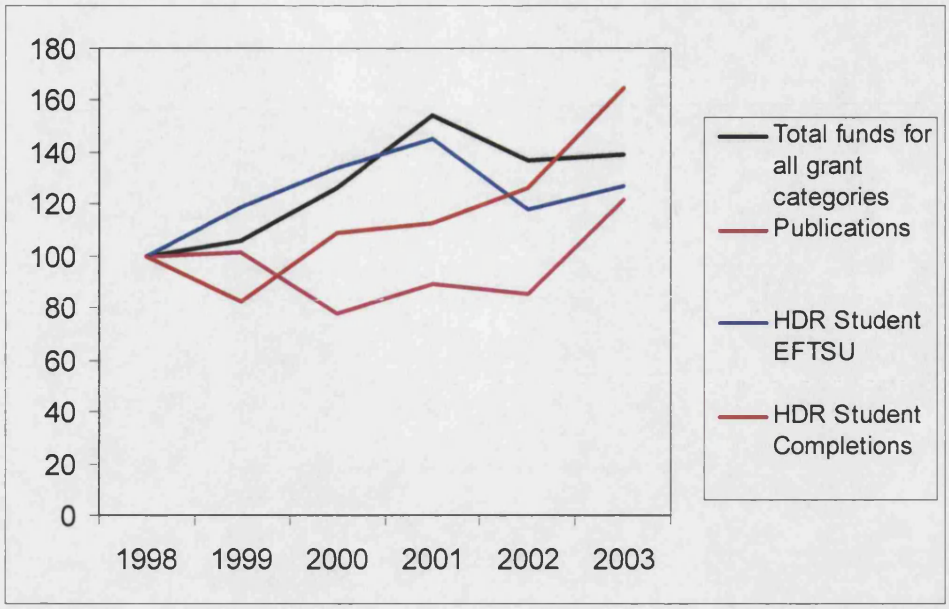
students, and is partly the result of a negotiated transfer of EFTSU between the Faculty of Health Sciences and the Faculty of Humanities and Social Sciences of the University, and partly the development of full fee programs at the post graduate level.

Figure 3:2 Student Load (EFTSU - all fund sources) enrolled in the Faculty of Health Sciences, 1998-2003



Research activity is also increasing (see Figure 2.3). Total grant funding to the Faculty has increased 40% since 1988 (from $6.4 million to $8.8 million). Publications have not increased as rapidly (a 22% increase). Higher degree research students have increased in line with undergraduate enrolments.

Figure 3:3 Research activity (indexed) in Faculty of Health Sciences, 1998-2002



Faculty structure

The Faculty of Health Sciences of La Trobe University is organised into eight Schools and five autonomous Centres. The Schools are: Human Biosciences; Human Communication Sciences; Nursing and Midwifery; Occupational Therapy; Orthoptics; Physiotherapy; Public Health; and Social Work and Social Policy.

The Centres are: Australian Institute for Primary Care; Australian Research Centre for Sex, Health and Society; Mother and Child Health Research Centre; Refugee Health Research Centre; and the Bouverie Centre.

Two of the Schools have significant multi-campus operations. Nursing (with major academic centres at Bundoora, Albury-Wodonga and Mildura, with the Bundoora program having significant "clinical school" operations at the Royal Women's Hospital, the Austin and the Alfred); School of Social Work and Social Policy (Bundoora, Albury-Wodonga and Mildura)

Table 3.4 shows the size of the various Schools in 2003 in terms of equivalent full-time student enrolments and staff.

Table 3:4 Student and staffing by organisational unit, 2003

	Students (EFTSU)				Staffing		
Unit	Undergraduate	Postgraduate by coursework	Higher degrees (Research)	Total	Academic	General	Total
Human Biosciences (including Department of Podiatry, National Centre for Prosthetics and Orthotics, Physiology & Anatomy)	656.7	0.8	10.6	668.1	36.2	13	49.2
Human Communication Sciences (including National Institute for Deaf Studies)	236.9	46	7	289.9	13.8	9.1	22.9
Nursing							
Bundoora	498.4	234.2	23.7	756.3	34.1	19	53.1
Albury Wodonga	210.9	7.3	0.7	218.9	6.6	2.6	9.2
Off-shore	212.7	33.2	2.5	248.4			0
Subtotal - Nursing	*922*	*274.7*	*26.9*	*1223.6*	*40.7*	*21.6*	62.3
Occupational Therapy	343.3	43.4	6.4	393.1	15.5	6	21.5
Orthoptics	75.9	0	1.8	77.7	5.5	1.8	7.3
Physiotherapy	319.4	3.9	15.5	338.8	14.9	5.8	20.7
Public Health							
Bundoora (including Palliative Care Unit)	513.4	204.8	58.5	776.7			51.2
Off-shore		110		110	35.7	15.5	0
Subtotal -Public Health	*513.4*	*314.8*	*58.5*	*886.7*	*35.7*	*15.5*	51.2
Social Work & Social Policy							
Bundoora	220.6	12	9.2	241.8	11.5	4.5	16
Albury/Wodonga	91	2.3	0.6	93.9	6.2	2.2	8.4
Subtotal -Social Work & Social Policy	*311.6*	*14.3*	*9.8*	*335.7*	*17.7*	*6.7*	24.4
Bouverie Centre	0	25	5.5	30.5	2.1	14.1	16.2
Centre for the Study of Mothers' and Children's Health	0	0	4.8	4.8	11	2.6	13.6
Australian Research Centre in Sex, Health and Society	0	0	12.5	12.5	18.2	5.2	23.4
Centre for Professional Development					2.1	0.5	2.6
Australian Institute for Primary Care					15.2	4	19.2
Faculty Office (including Faculty Support Services-Information Services Unit and Technical Services Unit)					3.3	20.3	23.6
Total	**3379.2**	**722.9**	**159.3**	**4261.4**	**231.9**	**126.2**	**358.1**

It can be seen that the largest School, accounting for over one quarter of enrolments, is the School of Nursing and Midwifery. The School of Human Biosciences and the School of Public Health each account for about one fifth of enrolments. Physiotherapy, Occupational Therapy, Human Communication Sciences and Social Work each account for around 10% of all enrolments.

A structure of this kind has a number of strengths and weaknesses. In terms of strengths, because in most cases the Schools are relatively homogenous, the Schools have clear and coherent missions with relatively limited number of stakeholders. For example, the School of Physiotherapy focuses on physiotherapy education, research relevant to physiotherapy, and liaison with the physiotherapy profession. The same is true for the Research Centres, with a relatively clear and coherent mission.

Secondly, the relative coherence of the Faculty also assists in intra-Faculty decision-making processes.

Thirdly, a structure based on multiple, homogenous units facilitates the adoption of systems of reporting comparative performance data (in terms of student retention rates, research publication rates) and, to some extent, the values questionnaire is a further example of use of data for comparative purposes within the Faculty. Comparative benchmarking helps Schools to identify potential areas for improvement in their performance and, given the collegial atmosphere of the Faculty, allows for cross-School learnings.

These strengths need to be balanced against a number of weaknesses. The very focus of the individual Schools is to some extent also a weakness in the contemporary environment. Research in health sciences is increasingly multi-disciplinary and because academics feel more comfortable operating within their own organisational unit, the predominately single disciplinary structure of Schools makes it is more difficult to establish multi-disciplinary research within the Faculty. Secondly, the narrow focus of the Schools inhibits cross-disciplinary learning in the undergraduate program. Thirdly, the large number of Schools means that I, as Dean, have a very broad span of control, somewhat larger than management textbooks recommend. My response to this has been to have management processes (and a leadership style) that incorporate substantial delegation to Heads of School and Directors of Research Centres, in turn allowing significant autonomy in their operations. This facilitates the entrepreneurial behaviour discussed below.

The School structure also increases management overhead through requiring representation of all of the Schools in many of the decision-making processes of the organisation. This diverts academic time, especially, away from teaching and research activities. There was a marginal restructure of the Faculty on 1st January 2005 when the School of Orthoptics was incorporated into the School of Human Biosciences as a new Department of Clinical Vision Sciences.

The Faculty of Health Sciences is *prima facie*, relatively homogeneous and there is a strong sense of coherence within the Faculty mainly centred on a commitment to high quality professional education for the health and welfare professions. However, there are significant differences in culture within the Faculty, most obviously between those organisational units with a principal focus on research and research training and those with a dual teaching and research focus. But there are also differences between the Schools in their focus on research, possibly reflecting underlying disciplinary differences.

Becker and Trowler (2001) have suggested that disciplines can be characterised on four key dimensions, two relating to their academic characteristics (the 'cognitive realm': 'hard' vs 'soft'; and pure vs applied) and two relating to the social characteristics of research in the discipline (convergent vs divergent in terms of discipline heterogeneity and 'urban' vs 'rural', reflecting differences in the researcher: problem ratio – a large number of researchers addressing a common problem being described as urban).

Most organisational units in the Faculty rest firmly at the applied end of a pure-applied continuum. But the different disciplines in the Faculty could be placed at different points on the other continua. Physiotherapy, for example, is developing as a strong quantitatively based discipline ('hard'), with strong convergence, probably urban in character. In contrast, occupational therapy is a relatively heterogeneous discipline with a very broad service remit and, concomitantly, quite divergent research activities. Some of this research is heavily quantitative, particularly physiological; other research is qualitative.

For much of its history, La Trobe or one of its predecessors was the sole provider of preparation in the relevant clinical discipline in Victoria. As a result, a very high proportion of staff in these disciplines obtained all their academic education at La Trobe or its predecessors. This leads to very strong systems of transmitting culture in

these Schools and distinguishes them from those Schools where academic staff have experienced a more diverse range of academic preparations.

An "entrepreneurial" Faculty

The Faculty of Health Sciences is perceived within La Trobe University as dynamic and "entrepreneurial". This reputation is in part related to its advocacy within the University, but in part is based on results and its *modus operandi.* For example, the Faculty has expanded in government-funded enrolments at the expense of other Faculties within the University through a negotiated transfer of places from Humanities and Social Sciences to Health Sciences, it has been very successful in attracting industry funding for academic posts in association with health care agencies, and in attracting industry-funded research grants and consultancies.

Although Burton Clark's (1998, 2004) pathways for entrepreneurial activity were developed to describe University development, they can also be applied to distinct units within a University, a point he explicitly recognised in later work (Clark 2004) where he added 'entrepreneurialism in heartland departments' as part of his transformational elements. The Faculty of Health Sciences can be characterised in terms of Clark's pathways (using the 1998 terminology):

The strengthened steering core.
In 1993 there was an internal restructuring of La Trobe University that created a five Faculty structure, replacing the historic School-based structure. Although the new Faculty of Health Sciences was essentially based on the previous Lincoln School of Health Sciences, the decanal position was an appointed one rather than elected and this gave the new Dean (the author) enhanced power within the Faculty compared to his predecessor. The Faculty Office of the Faculty of Health Sciences became stronger as a result and was able to provide the strengthened steering core necessary for entrepreneurial development.

Expanded development periphery.
The Faculty of Health Sciences has a structure unlike other Faculties in the University, particularly through the creation of the autonomous Research Centres. These Centres have the characteristics that Clark identified in entrepreneurial universities, in that they are "interdisciplinary, project-oriented research centres that grow up alongside departments, as a second major way to group academic work". The Research Centres

(together with the Australian Institution of Primary Care) have proven to be a major success in terms of strengthening the research profile of the Faculty.

A diversified funding base.

The Faculty of Health Sciences has been relatively successful in growing non-standard revenue. In particular, the Faculty has been successful at attracting industry research grants/consultancies and through attracting ongoing funding from health agencies and the State Department of Human Services for funding of professorial positions.

A stimulated academic heartland.

Burton Clark identified the need for "a stimulated academic heartland" as part of the pathway to an entrepreneurial university. He identified (1998, page 7) that "For change to take hold, one Department and Faculty after another needs itself to become an entrepreneurial unit..". This has certainly been the case with the Faculty of Health Sciences. Within the Faculty, the Australian Institute for Primary Care and the Australian Research Centre for Sex, Health and Society have both begun to exhibit the characteristics of entrepreneurial units.

The integrated entrepreneurial culture.

Clark's fifth essential element for entrepreneurial universities is the integrated entrepreneurial culture. Again, this characterises the Faculty of Health Sciences where funding is provided by the Faculty Office (the steering core) to pump prime initiatives. Staff are aware that the Faculty/Dean generally supports new developments. This "risk taking" style means that staff feel able to discuss options and opportunities with the Dean. Staff in the Faculty have initiated new teaching programs (eg. a full fee problem-based learning Master of Speech Pathology as a new graduate entry pathway to that profession, the creation of a "Centre for Professional Development" funded by the State Department of Human Services to provide training in reflective practice for staff of that Department and funded agencies).

The Faculty leadership has not seen the emphasis on entrepreneurial activity within the Faculty as at the expense of traditional academic values. Entrepreneurialism *per se* is not antithetical to expressed academic values such as academic freedom, pursuit of excellence, and so on. Although managerialism in Australian universities may impact on traditional academic decision-making processes (Marginson and Considine 2000), this does not necessarily lead to violation of key tenets of academic life. Obviously some forms of entrepreneurial behaviour, such as the mindless pursuit of full-fee students (be they domestic or international), may be seen to lead to a

diminution of academic standards, such strategies were seen in the Faculty of Health Sciences as being of short-term benefit only. In the long-term the interest of the Faculty of Health Sciences was seen to be positioning itself as a high quality Faculty with high standards, with its graduates being seen to be very well prepared for the relevant professions. The Faculty's emphasis on research growth rather than pursuing growth in size of the undergraduate population through international markets, was also consistent with traditional academic values.

However, these comments are written from the perspective of me as Dean, and part of the purpose of the Faculty values questionnaire was seen as one way of assessing the extent to which traditional values were still shared across the Faculty and the extent to which they were observed across the Faculty.

Conclusion

The history of the Faculty of Health Sciences as a former College of Advanced Education has significant influence on the aspirations of the Faculty in terms of an emphasis on growing a research culture in the Faculty. In terms of structure, the Faculty is relatively coherent, with a very strong emphasis on professional preparation for health and social work professions. Its history has also influenced the structure of the Faculty, with the predominance of single disciplinary Schools that in turn can trace their antecedents to the profession-specific training programs of 50 years ago.

An important structural element of the Faculty is that a significant proportion of its research activity is concentrated in Research Centres that have limited undergraduate enrolments. These Centres have a quite distinct mission within the Faculty that could logically lead to differences in the values held in those organisational units.

This first part of the thesis has outlined the development of the values questionnaire and describes the setting for its administration. The next part presents the results, starting with the next chapter, which examines the extent to which staff in all of the organisational units in the Faculty identify with the values that were identified by the Faculty as a whole.

Part II

Results

Chapter 4: Values held by staff

This chapter reports the analysis of one aspect of the values questionnaire, namely the extent to which staff identify with the values outlined in the Faculty values questionnaire. In addition to reporting on attitudes of staff overall (addressing research aim 1), it addresses research aims 3 and 4 by examining differences between groups of staff in perceived importance of the listed values.

The first Part of this thesis introduced the Faculty of Health Sciences' values questionnaire and described the evolution and current situation of the Faculty.

The Faculty values statement asserts that:

'Staff in the Faculty of Health Sciences value:

- Putting students first;
- Working together cooperatively and respecting each other;
- Making a contribution to health, health care and society;
- Excellence in teaching, research and scholarship;
- Intellectual freedom and academic integrity;
- A safe working and learning environment.'

The thesis is about evaluating whether these espoused values are a reality within the Faculty.

This part of the thesis reports on the analysis of the values questionnaire. It consists of four main chapters, the first three reporting on the three main questions in the questionnaire: chapter 4 reporting on values held by staff ('How important is this value to you personally?'); chapter 5 reporting on the observed values in the work unit ('To what extent can you observe this value in your School/Centre/Unit?'); and chapter 6 reporting on the observed values within the University as a whole ('To what extent can you observe this value in the University as a whole?'). The fourth chapter in Part 2, chapter 7, provides more detail of results relating to what turns out to be an aberrant School within the Faculty of Health Sciences, the School of Nursing and Midwifery.

It will be recalled that the development of the values questionnaire had two main antecedents: an interest in morale in the Faculty and the need to develop a 'Values and Resources' plan. Both antecedents lead to an analysis strategy focussing on results which are of management relevance. The first cut in the analysis is generally therefore in terms of the organisational units of the Faculty, first by comparing the Schools and Research Centres, and then within each of those broad categories

comparing Schools and comparing Research Centres. Given the very different nature of their roles, analysis of differences in perceptions of administrative and academic staff is also undertaken.

However, although the main frame of analysis is focussed on utilisation of the results for management purposes, consideration was also given to the wider ramifications of the questionnaire and its results in terms of lessons that go beyond the management purposes within the Faculty of Health Sciences in terms of replication and further research.

The main questions in the questionnaire seek to elicit answers on a five-point Likert scale, yielding ordinal level data. Classificatory variables are nominal (School, employment category) or ordinal (length of time employed). This predisposes to the use of non-parametric statistics in the analysis (Gibbons 1993, Newton and Rudestom 1999). However, with a large enough sample size, ordinal data can approach normality and can be analysed using parametric statistics.

The approach followed in presenting results is similar across the three main results chapters. First descriptive statistics of the results of the question which is the focus of the chapter are presented. In this introductory section of each chapter the Kolmogorov-Smirnov test is used to assess the extent to which the distribution of results follows the normal distribution. The Kolmogorov-Smirnov test is a robust, nonparametric test which measures the extent to which a distribution is significantly different from the normal distribution (Siegel 1956). As it turns out generally the distributions are significantly different from the normal distribution, and the use of nonparametric methods for testing differences is reaffirmed.

Although nonparametric statistics are generally used for comparison, interpretation of a nonparametric statistic can be difficult to describe. In particular, many nonparametric statistics are based on analysis of ranks, in contrast to parametric statistics which are based on means. In order to provide an intuitive interpretation for the analysis, a mean response is generally reported and the mean is used in the text to describe the results. For example, when comparing two distributions, the nonparametric equivalent of the t-test, the Mann Whitney U, is used to test significant differences. The Mann Whitney U thus can be used to test whether the 'pattern of responses' to a particular question is different between two different groups of staff (eg. administrative versus academic staff). Typically I am looking to assess whether some groups of staff are more inclined to answer higher (or lower) along the response scale than other groups. Mann

Whitney U is calculated by comparing relative ranks of the variable under review for the two classificatory variables: the tables used in the thesis to illustrate the data report the mean even though the rank was used in the data analysis.

In cases where three distributions are being compared, the nonparametric equivalent of the F test (Kruskal Wallis) is generally used. Kruskal Wallis is thus used in circumstances similar to Mann Whitney U but where, rather than analysing differences between two groups of staff, there are three or more groups of interest (eg. between the various Schools).

Ideally, the analysis reported in each chapter would be multi-variate, examining differences between Schools and Centres and then within Schools and Centres between academic and administrative staff. Other classificatory variables could also be utilised, such as the length of time employed at La Trobe University or its predecessors. Unfortunately the sample size generally did not allow multi-variate analysis of this kind, except in the larger Schools. Thus the analysis in most of the chapters is restricted to bi-variate analysis.

The first question in the values survey asked staff to rate how important the values that had been developed through the consultative process were for them personally. This chapter reports on the analysis of the responses to that question.

Table 4:1 shows frequency distribution and other descriptive statistics for the importance of the espoused values.

Table 4:1 Importance of espoused values to staff personally

	Frequency Distribution (Percent)							
	1 *Not at all important*	2	3	4	5 *Extremely important*	Mean Response	Kolmogorov-Smirnov	Valid N
Putting students first	1.8	1.2	3.7	37.8	55.5	4.4	4.1	164
Working together co-operatively and respecting each other	0.6	0.0	1.2	14.8	83.4	4.8	6.3	169
Making a contribution to health, health care and society	1.2	1.2	7.7	32.5	57.4	4.4	11.4	169
Excellence in teaching, research and scholarship	0.6	2.5	6.2	14.8	75.9	4.6	5.7	162
Intellectual freedom and academic integrity	0.6	1.8	4.9	24.4	68.3	4.6	5.1	164
A safe working and learning environment	0.6	0.0	5.4	21.4	72.6	4.7	5.6	168

It can be seen that all of the values are highly ranked by staff, with a majority of staff identifying each of the value statements as extremely important to them personally and all statements having a mean score on the 5 point Likert scale of more than 4. This very high rating is not surprising as the value statements were developed through consultations with staff and other value statements were eliminated prior to the questionnaire being circulated.

However, some differences between the questions can be seen in the proportion of staff that rate the value at the highest point, extremely important, and the trailing tail in some of these questions. Five of every six staff in the Faculty state that working together productively and respecting each other was extremely important to them. This is the value statement with the highest such commitment from staff on this measure. In contrast, only slightly more than five out of every nine staff rated making a contribution to health, health care and society as extremely important. Similarly, for intellectual freedom and academic integrity, two-thirds of staff ranked that value as extremely important to them. There is a statistically significant difference in the importance ascribed to each of the value statements (Friedman $x^2 = 49.74$; $p = .000$). Table 4:2 shows the bi-variate comparisons in importance.

Table 4:2 Comparison between rankings of importance of value statements

	Putting students first (1)	Working together cooperatively and respecting each other (2)	Making a contribution to health, health care and society (3)	Excellence in teaching, research and scholarship (4)	Intellectual freedom and academic integrity (5)	A safe working and learning environment (6)
Putting students first (1)		2>1		4>1		6>1
Working together cooperatively and respecting each other (2)			2>3		2>5	2>6
Making a contribution to health, health care and society (3)				4>3		6>3
Excellence in teaching, research and scholarship (4)						
Intellectual freedom and academic integrity (5)						

The table shows the relationship between values indicated by row and column numbers. Only relationships (rankings) with significant differences < .01 on Wilcoxon signed ranks test are shown. (The Wilcoxon test is described in Chapter 5).

As was reflected with the modal values, Table 4:2 shows that the value working together cooperatively and respecting each other was seen as more important than four of the other five value statements, the only exception being the value relating to excellence in teaching, research and scholarship. The value putting students first is also ranked below other values: in addition to being ranked in importance below working together cooperatively and respecting each other, it is also ranked below excellence in teaching, research and scholarship and a safe working and learning environment. Those latter two values are also seen by staff as more important than making a contribution to health, health care and society.

It is possible to assess the extent to which staff agreed with all of the value statements. Almost one-quarter of staff (41 out of 169) answered that each of the six value statements was extremely important to them. A further 34 indicated that five of the six value statements were extremely important, and a further 30 that four of the value statements were extremely important. In total, then, almost two-thirds of respondents indicated that the majority of the value statements were extremely important to them

(105 out of 169). Table 4:3 shows the distribution of respondents in terms of how many of the value statements were rated extremely important and how many were rated at the next level (point 4) on the five point Likert scale.

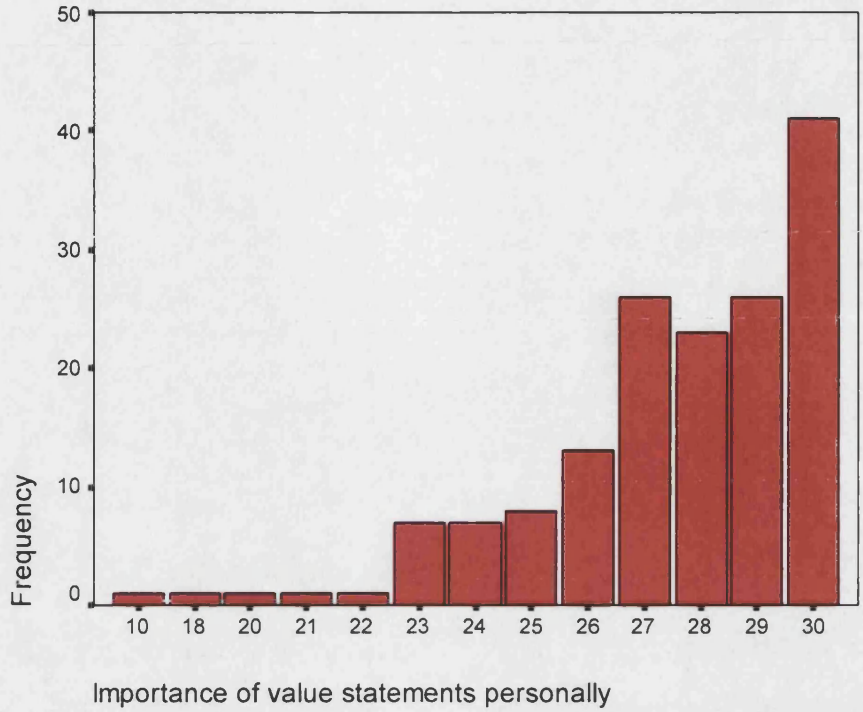
Table 4:3 Cross-tabulation of rankings at top and second top of Likert scale

	Number of value statements ranked at point 4 on Likert scale						Total
Number of value statements ranked extremely important	0	1	2	3	4	5	
0	1	0	0	1	0	4	6
1	0	0	1	1	2	0	4
2	1	2	2	5	6	0	16
3	1	7	11	19	0	0	38
4	0	11	19	0	0	0	30
5	8	26	0	0	0	0	34
6	41	0	0	0	0	0	41
Total	52	46	33	26	8	4	169

It can be seen that, of those who rated four of the statements as extremely important, 19 rated the other two at point 4 on the five point scale, with the remaining 11 rating at least one other statement as point 4. A similar pattern of high level of agreement is shown with those who ranked three statements as extremely important, with 19 of the 38 respondents in that category ranking the other three statements at 0.4.

A further way of assessing agreement with the espoused values is to sum the scores assigned by staff to each of the value statements. This creates a continuous variable with a minimum score of six (if all of the statements were ranked as not at all important) and a maximum score of 30 (if all of the statements were ranked as extremely important). Figure 4:1 shows the frequency distribution of the scores on this variable.

Figure 4:1 Frequency distribution of cumulative importance of values statements personally (Cumulative score across all statements)



It can be seen that the distribution is highly skewed to the left. The modal value is the maximum and, as would be expected from such a skewed distribution, the mean (27.49) is below the median (28). Kolmogorov-Smirnoff (2.236) shows a significant different distribution from the normal distribution.

The strong endorsement of the value statements also skews responses for the individual results for each of the values statements and the results are thus not normally distributed, with the Kolmogorov-Smirnov test showing a significantly different distribution from the normal (see Table 4:1). Comparison between groups of respondents will therefore be based on non-parametric statistics appropriate for ordinal level data (Siegel, 1956, Hartwig and Dearing, 1979). For presentation purposes and ease of explanation, means of responses will be shown in tables, although the statistical tests are usually based on mean ranks.

Differences in responses between groups

It was hypothesised in Chapter 1 that there may be differences between different Schools, different types of organisational units and different types of staff (research aims 3 and 4). Some of the individual value statements could be expected to resonate differently in different parts of the Faculty or with different groups. For example, putting students first may be of less importance in Research Centres with few students. Administrative and technical staff may also place a different importance on this value compared to academics.

Table 4:4 shows the mean importance of espoused values by staff classification, i.e. whether the staff are academics or administrative or technical staff.

Table 4:4 Mean importance of espoused values to staff by staff classification and non-parametric measure of difference in distribution

	Staff Classification		
	Academic	Administrative/Technical	Mann Whitney U
Putting students first	4.4	4.5	2384
Working together co-operatively and respecting each other	4.8	4.9	2779
Making a contribution to health, health care and society	4.6	4.1	1808*
Excellence in teaching, research and scholarship	4.9	4.1	1573*
Intellectual freedom and academic integrity	4.8	4.2	1741*
A safe working and learning environment	4.7	4.7	2536

* Significant difference in mean ranks at 0.05

There are three values that resonate differently between academic and administrative/technical staff (significance measured by Mann-Whitney U): making a contribution to health, health care and society; excellence in teaching, research and scholarship; and intellectual freedom and academic integrity. These differences to some extent reflect the differences in the nature of the work. Most of the academic

staff of the Faculty are health professionals and as part of their role as academic staff, have an expectation of service to the community. Thus it is logical to expect that they would value making a contribution to health, health care and society more highly than administrative or technical staff that do not have either the professional training of the academics or the specific job expectation of a community service role.

Similarly the role of academic staff is in teaching, research and scholarship, whilst administrative and technical staff are supporting teaching, research and scholarship. Administrative staff may have responded differently to a value that is about excellence in support for teaching, research and scholarship that would reflect more the role of administrative and technical staff in the Faculty.

The third area of difference relates to intellectual freedom and academic integrity. This value reflects more directly on the actual work of academics in terms of their role in research and teaching, and is less part of the role of administrative and technical staff.

Importantly, there is no significant difference in the other three values, two of which are generic ones about the job environment: working together co-operatively and respecting each other; and valuing a safe working and learning environment. The value of putting students first is also one where no significant difference was detected.

Table 4:5 explores whether there are differences in importance of particular values by the principal function of the work unit, eg. between Research Centres in the Faculty that do not have direct responsibility for students, versus the Schools, who have both teaching and research responsibilities.

Table 4:5 Mean importance of espoused values to staff by principal function of work unit and non-parametric measure of difference in distribution

	Principal Function Of Work Unit			
	School	Research Centre	Faculty Central Service	Mann Whitney U (Research Centres vs Schools)
Putting students first	4.5	3.9	4.6	601*
Working together co-operatively and respecting each other	4.8	5.0	4.9	1061*
Making a contribution to health, health care and society	4.4	4.6	4.2	1159
Excellence in teaching, research and scholarship	4.6	4.7	4.4	1131
Intellectual freedom and academic integrity	4.6	4.9	4.4	943*
A safe working and learning environment	4.6	4.7	4.9	1272

* Significant difference in mean ranks at 0.05

The Kruskal-Wallis test showed that there is significant difference in the distribution of responses on the value, Putting students first ($x^2 = 9.2$, $p = .01$). A visual inspection of the mean responses suggests that the attitudes of staff in Faculty central services and Schools are very similar, but there appear to be differences between the staff in these two groups and staff in Research Centres. Further exploration was therefore undertaken comparing staff in Schools, on the one hand, and Research Centres, on the other. There are three areas of difference between Research Centres and Schools: putting students first; working together co-operatively and respecting each other; and intellectual freedom and academic integrity.

The difference in proportion of putting students first in part reflects the very different roles between Research Centres and Schools. Although the Research Centres enrol doctoral students, the major mission of the Research Centres is obviously research and so a lower commitment to a value of putting students first could be expected.

The difference in terms of working together co-operatively and respecting each other is surprising. It is difficult to mount an argument that research in any way requires more co-operation than the teaching endeavour. It may be that staff in Schools have opportunities to interact with a different group, namely students. In Research Centres, relationships with work colleagues are a more central aspect of the job and hence this value becomes of higher importance.

Again it is interesting that the staff in Research Centres place a much higher value on intellectual freedom and academic integrity, possibly reflecting the fact that the challenges to intellectual freedom and academic integrity may be greater in those environments, especially where the Research Centres in the Faculty have a much higher reliance contract and commissioned research compared to research funding from traditional resources.

Staff in Research Centres were homogenous in the relative importance of espoused values: there were no statistically significant differences between Centres (Kruskal-Wallis Test). In contrast, significant differences in distributions were found between Schools on the value of putting students first (χ^2= 22.05, p = 0.005) and safe working and learning environment (χ^2= 20.28, p = 0.009). These differences were therefore explored further to ascertain which Schools were contributing to the significant differences in distributions. Table 4:6 shows the mean scores for espoused values in the separate Schools.

Table 4:6 Mean importance of espoused values to staff by School

	Mean	
School	Putting students first	A safe working and learning environment
Human Biosciences	4.55	4.73
Human Communication Sciences	4.40	4.60
Social Work and Social Policy	4.00*	3.90*
Orthoptics	5.00	4.75
Occupational Therapy	4.45	4.91
Bouverie Centre	3.00	5.00
Public Health	4.36	4.57
Physiotherapy	4.46	4.58
Nursing and Midwifery	4.88*	4.69*
Total	4.49	4.62

* Mean ranks significantly different from all other schools on the Mann-Whitney U test at 0.05

In order to explore the reasons for the differences in the distributions, a Mann Whitney U test was undertaken comparing the mean ranks for each School compared with the mean ranks for all other Schools. Two Schools were shown to have different distributions from the others. Staff in the School of Social Work and Social Policy put a lower value on a safe working and learning environment compared to staff in all other Schools (Mann-Whitney U = 1075, $p < .001$). The results for this School were further analysed to ascertain whether these staff put a higher importance on any other values. This proved not to be the case, although staff in this School also placed a lower importance on working together co-operatively and respecting each other compared to staff in all other Schools. These differences may reflect real differences in emphasis, but they may also represent a propensity for staff in the School of Social Work and Social Policy to cluster responses in the middle of the distribution rather than using the extreme points.

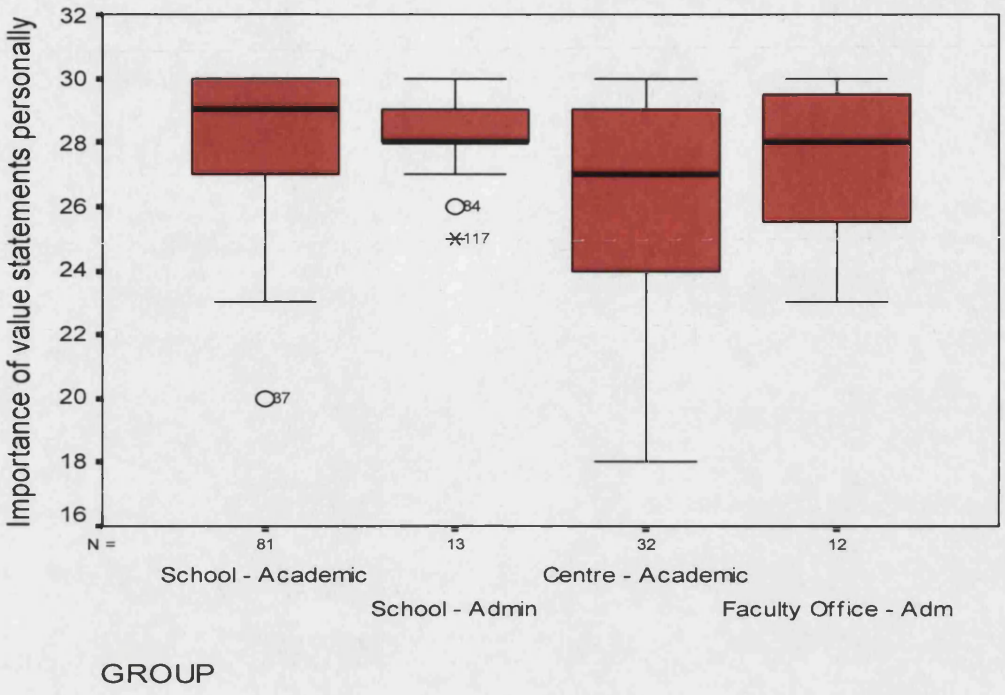
Staff of the School of Nursing and Midwifery place a higher value on putting students first than staff in other Schools. There is no significant difference in the importance placed by staff of that School on other values.

No statistically significant differences were found in importance of particular values based on the length of time staff had been employed in the Faculty, nor on seniority of academic staff (based on a dichotomous variable: level D/E staff vs other academic staff).

The continuous measure of identification with the value statements can also be used to explore differences between groups within the Faculty. Figure 4:2 shows box plots for the continuous measure for the four largest groups of staff: academics in schools and centres and administrative staff in schools and in the Faculty Office.

(A box plot or 'box and whisker plot' is a commonly used method of exploratory data analysis (Hartwig with Dearing, 1979). The box represents 50% of the observations with the heavy line in the middle of the box representing the median, so 25% of the observations within the box are below the median and 25% of the observations are within the box above the median. The lines connected to the box represent those cases that fall within one inter-quartile range of the box with individual scores falling outside that distribution being shown individually. Box plots provide a good visual summary of differences between distributions of non-parametric data.)

Figure 4:2 Box plot of cumulative importance score by staff type



The box plot shows visually the differences between the groups in the cumulative importance score (the differences are significant on Kruskal-Wallis 8.9, p=0.03). This visual portrayal confirms the analysis of the individual items with the median for the academics in schools being higher than the other groups thus suggesting stronger identification across the board by this group with the values statements. (The difference in ranks between School-based staff and all other staff is statistically significant on Mann Whitney U, z=-2.79;p=.05)

There is no statistically significant difference between the cumulative importance of value statements by the length of time employed at La Trobe University or its predecessors (Kruskal Wallis = 2.6, p = 0.46).

Conclusion

This study of espoused values has shown that the process of identifying values undertaken in the Faculty in 2003 appears to have identified values that are extremely important to staff in the Faculty. To some extent this finding should not be surprising: a consultative process was used to develop the values statements and we were asking

the same group (staff) to confirm the result of the consultation. Further, as shown in Chapter 3, the Faculty is relatively homogenous with individual Schools (but not Research Centres) sharing common histories.

However, as hypothesised in research aim 4, differences were found between academic and administrative/technical staff in their emphasis on a number of these values. These differences can probably be explained in terms of the different roles performed by staff in these two categories.

In line with research aim 3, there were also differences found between the espoused values of staff in Research Centres compared with staff in teaching Schools of the Faculty. Again, these differences probably reflect underlying differences in values related to the nature of the work in the two different types of organisational units.

Some differences were found between the values espoused in two Schools of the Faculty – the School of Social Work and Social Policy and the School of Nursing and Midwifery – compared with peers in other Schools. There is no apparent explanation for these differences.

Chapter 5: Observed Values in the Work Unit

The literature review identified the importance of the immediate work environment on formation of culture and values.

This chapter reports on the second aim for the values questionnaire: the extent to which the identified values are observed in the local workplace of the staff member. Differences between types of workplace and barriers to adherence to the value statements identified using free responses are analysed in line with research aim 5. The chapter also analyses differences between answers to the questions about

In the previous chapter I reported on the values held by staff in the Faculty of Health Sciences. In this chapter I report on the extent to which those values are observed in practice in the immediate work unit within the Faculty of Health Sciences.

As with Chapter 4, the analysis strategy in this chapter focuses on identifying issues important to the management of the Faculty. After the descriptive analysis, bivariate analyses focus on management units of the Faculty and different categories of staff (academic versus administrative).

Staff were asked to rate on a Likert scale observance of the espoused values by answering a question, "To what extent is this value observed in your School/Centre/Unit?", with the response scale ranging from 1 (to a very small extent) to 5 (to a very great extent). Table 5:1 shows the frequency distribution of observed values; mean response, the result of a Kolmogorov-Smirnov Z test and the number of valid responses.

Table 5:1 Extent to which value statements are observed in the workplace

	Frequency Distribution (Percent)							
	1 *Very small extent*	2	3	4	5 *Very great extent*	Mean Response	Kolmogorov-Smirnov	Valid N
Putting students first	1.2	11.0	25.8	36.2	25.8	3.74	2.8	163
Working together co-operatively and respecting each other	6.5	10.7	18.9	42.0	21.9	3.62	3.5	169
Making a contribution to health, health care and society	1.2	6.5	14.8	42.6	34.9	4.04	3.4	169
Excellence in teaching, research and scholarship	3.2	3.7	20.2	40.5	32.5	3.96	3.2	163
Intellectual freedom and academic integrity	1.8	6.1	23.3	44.8	23.9	3.83	3.3	163
A safe working and learning environment	2.4	6.6	19.2	38.3	33.5	3.94	3.1	167

In contrast to the espoused values, where the modal value was 5, the modal response for every value statement occurs at point 4 on the 5-point Likert scale. Mean scores were generally between 3.5 and 4 on the 5-point scale (with response to the value "Making a contribution to health, health care and society" being marginally above 4), suggesting that overall these values are observed in practice. Between one-fifth and one-third of respondents responded that the values were observed to a very great extent in their workplace. Again this is a very positive response.

The Kolmogorov-Smirnov test shows that the responses for each of the value statements are not normally distributed and therefore non-parametric measures will be used in reporting on these results. In line with the approach adopted in the previous chapter, means will be used to summarise responses rather than the mean rank that is the basis of many of the non-parametric tests used.

There is a statistically significant difference in the perceived value observance between the different value statements (Friedman $x^2 = 30.6$; $p = .000$.). Again bi-variate comparisons show the differences in rankings (Table 5:2)

Table 5:2 Comparison between rankings of value observance in the work unit

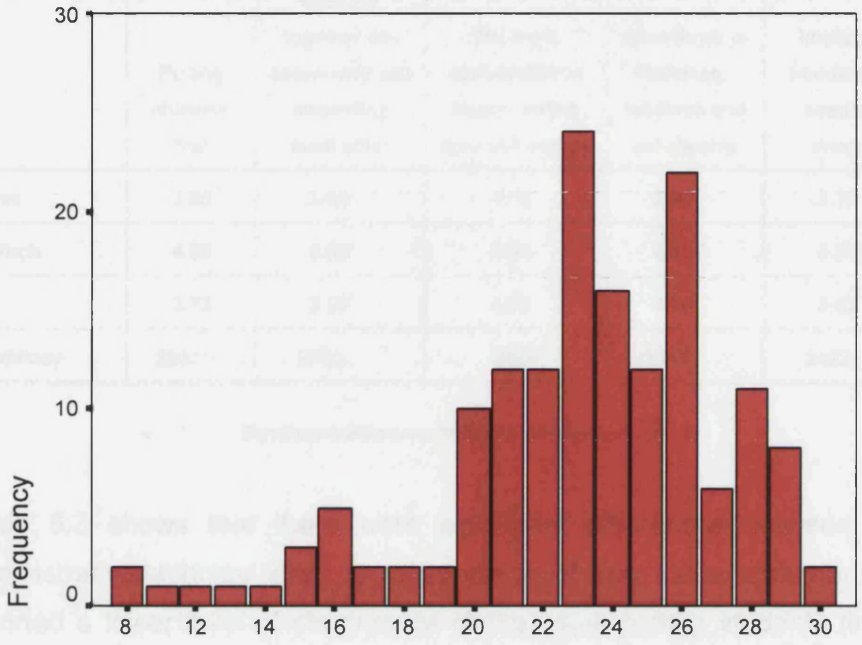
	Putting students first (1)	Working together cooperatively and respecting each other (2)	Making a contribution to health, health care and society (3)	Excellence in teaching, research and scholarship (4)	Intellectual freedom and academic integrity (5)	A safe working and learning environment (6)
Putting students first (1)			3>1			
Working together cooperatively and respecting each other (2)			3>2	4>2		6>2
Making a contribution to health, health care and society (3)					3>4	
Excellence in teaching, research and scholarship (4)						
Intellectual freedom and academic integrity (5)						

The table shows the relationship between values indicated by row and column numbers. Only relationships (rankings) with significant differences < .01 on Wilcoxon signed ranks test are shown.

Observance of the value working together cooperatively and respecting each other is ranked as lower than the observance of three other values: making a contribution to health, health care and society; excellence in teaching, research and scholarship; and a safe working and learning environment. Making a contribution to health, health care and society is also ranked higher in terms of observance than either putting students first or intellectual freedom or academic integrity.

As with the analysis of the importance of values held by staff, it is possible to create a continuous variable to measure the overall extent to which the value statements are observed in the workplace. Again the distribution ranges from a minimum of six to a maximum of 30. Figure 5:1 shows the frequency distribution for this measure of value observance in the work unit.

Figure 5:1 Frequency distribution of cumulative value observance in the work unit



The distribution of the cumulative extent of value observance in the work unit is skewed to the left. The mode, mean and medians are almost identical (mode = 23, mean = 23.13, median = 23). Kolmogorov-Smirnov (1.733) shows a significantly different distribution from the normal distribution.

Differences between staff

Table 5:3 shows the mean responses by whether the staff member's classification was academic or administrative.

Table 5:3 Observed values in Faculty of Health Sciences by work function: Mean responses and Mann Whitney U

	Putting students first	Working together co-operatively and respecting each other	Making a contribution to health, health care and society	Excellence in teaching, research and scholarship	Intellectual freedom and academic integrity	A safe working and learning environment
Academic	3.58	3.58	4.09	3.89	3.78	3.82
Admin/Tech	4.02	3.69	3.96	4.10	3.92	4.22
Total	3.73	3.62	4.05	3.96	3.82	3.96
Mann Whitney	2031*	2700	2784	2345	2422	2180*

* Significant difference between distributions, $p<.05$

Table 5.3 shows that there were significant differences between academic and administrative/technical staff on observance of two value statements. Academics reported a lower level of observance of the value putting students first compared to administrative and technical staff, and a lower level of observance of the value about a safe working and learning environment. It is not clear what the underlying reasons are for these differences.

There were no significant differences between responses in terms of the length of time staff had been employed in the University.

Differences between types of organisational unit

Table 5:4 shows the mean responses for observance of the different values between the types of organisational units within the Faculty of Health Sciences.

Table 5:4 Observed values in Faculty of Health Sciences by type of work unit: Mean responses and Kruskal-Wallis test

	Putting students first	Working together co-operatively and respecting each other	Making a contribution to health, health care and society	Excellence in teaching, research and scholarship	Intellectual freedom and academic integrity	A safe working and learning environment
Schools	3.76	3.48	3.99	3.93	3.78	3.83
Research Centres	3.06	4.19	4.76	4.15	4.14	4.19
Faculty central	4.29	4.00	3.50	4.21	3.93	4.50
Total	3.74	3.61	4.05	3.98	3.84	3.94
Kruskal Wallis	12.42*	10.38*	21.93*	3.05	2.98	8.48*

* Significant difference between distributions, $p<.05$

There is a significant difference between the responses on four of the six value statements, with Research Centres having a somewhat lower observance of putting students first, a higher observance of working together co-operatively and respecting each other, and making a contribution to health, health care and society, compared to other units. Schools have a somewhat lower observance of the value of a safe working and learning environment. The difference in observance to some extent reflects the differences in the emphasis placed on the values. It will be recalled that Research Centres placed a lower emphasis on putting students first as an espoused value, probably because of the different role of the work unit. The questionnaire provided for an open-ended response associated with each value, asking "What are the main factors that might inhibit adherence to this value in your School/Centre/Unit" staff in Research Centres made nine responses to factors that might inhibit adherence to that value, eight of which related to the concept that students were not the core business of the Research Centre.

Two units form the Faculty central services group: the Faculty Office and the Information Services Unit. There was no significant difference found in value observance between those two units. It can be seen that again overall there is a fairly high level of observance of the various values in the Faculty central groups unit, with all values other than "Making a contribution to health, health care and society" and "Intellectual freedom and academic integrity" having mean responses of above 4 on the 5-point Likert scale.

Most of the staff within the Faculty Office and the Information Services Unit are administrative or technical staff and it is thus not surprising that they do not see themselves making a contribution to health, health care and society. In terms of the work of those units, they are primarily administrative and technical; it might also explain a lower adherence to the value about intellectual freedom and academic integrity.

Table 5:5 shows the difference in observed values between the Research Centres within the Faculty of Health Sciences.

Table 5:5 Observed values in Research Centres in Faculty of Health Sciences: Mean values and Kruskal-Wallis test

Research Centre	Putting students first	Working together co-operatively and respecting each other	Making a contribution to health, health care and society	Excellence in teaching, research and scholarship	Intellectual freedom and academic integrity	A safe working and learning environment
Aust Institute for Primary Care	2.67	4.14	4.57	3.50	3.86	4.43
Mother and Child Health Research Centre	3.80	4.63	4.88	4.88	4.50	4.38
Aust Research Centre in Sex, Health and Society	2.80	3.67	4.83	3.83	4.00	3.67
Total	3.06	4.19	4.76	4.15	4.14	4.19
Kruskal Wallis	4.95	3.94	2.03	6.44*	3.	2.75

* Significant difference between distributions, p<.05

Table 5:5 shows that the Centres are homogenous with there being a statistically significant difference on only one value, namely the emphasis of excellence in teaching, research and scholarship. Exploring this value statement further shows that Mother and Child Health Research has a higher mean response than the other two Research Centres (Mann-Whitney U =20, p = .002)

Table 5:6 shows mean responses for Schools in the Faculty on the extent to which the values are observed within the School.

Table 5:6 Observed values in Schools in Faculty of Health Sciences: Mean values

School	Putting students first	Working together co-operatively and respecting each other	Making a contribution to health, health care and society	Excellence in teaching, research and scholarship	Intellectual freedom and academic integrity	A safe working and learning environment
Human Biosciences	4.09*	4.00*	3.86	4.05	3.90	4.14
Human Communication Sciences	4.10	4.10	4.10	4.00	4.00	4.10
Social Work and Social Policy	3.80	3.70	3.80	3.80	3.30	3.70
Orthoptics	4.00	3.50	4.25	4.25	3.75	4.75
Occupational Therapy	3.91	3.64	3.82	3.82	4.27	4.18
Bouverie Centre	5.00	4.50	5.00	4.50	4.50	4.00
Public Health	3.64	3.54	4.21	4.04	3.88	3.81
Physiotherapy	4.00	3.92	4.38	4.50*	4.08	4.08
Nursing and Midwifery	3.19**	2.27**	3.65	3.42*	3.24**	3.12**
Total	3.76	3.48	3.99	3.93	3.78	3.83
Kruskal Wallis	18.0†	37.5††	12.1	12.5	16.3†	19.4†

* Significant difference from all other Schools, $p < .05$

** Significant difference from all other Schools, $p < .01$

† Significant difference between distributions, $p < .05$

†† Significant difference between distributions, $p < .01$

There is a significant difference in the distribution of responses across Schools on the observance of four of the value statements: Putting students first (p=.02); Working together co-operatively and respecting each other (p=.000); Intellectual freedom and academic integrity (p=.04); A safe working and learning environment (p=.013). In order to examine the differences more thoroughly, more detailed analysis was undertaken comparing individual School responses with responses of all other Schools for each of the value statements using a Mann Whitney U, the results of these analyses (in terms of statistical significance) are also shown in Table 5:6.

There were three Schools where responses for that School to the observance of the values were significantly different from other Schools. Given the large number of comparisons (six value statements x eight Schools) analysis was undertaken in terms

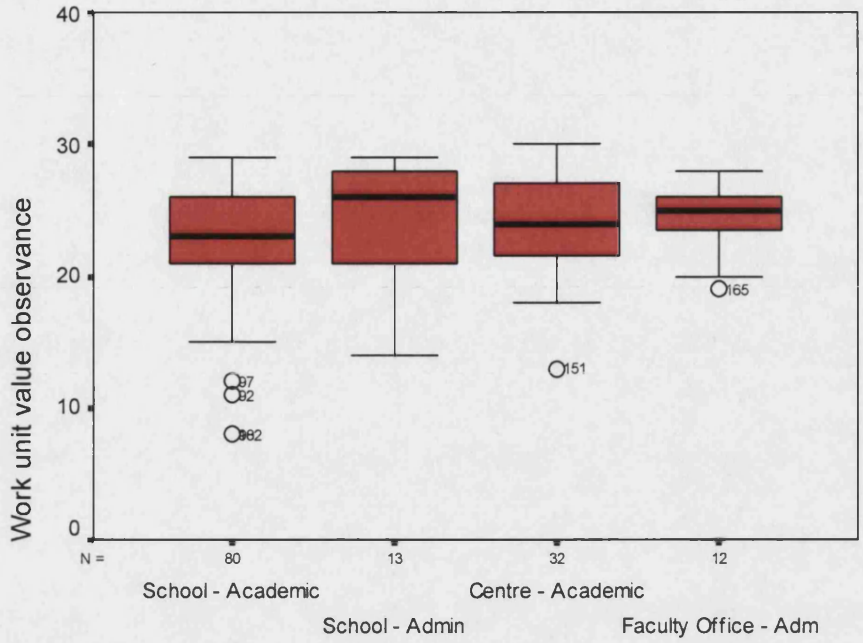
of significant differences at both .05 and .01 level. Table 5:6 also shows the results of significant differences between Schools using a Mann-Whitney test.

In the case of the School of Human Biosciences, the staff reported a higher degree of observance of the values relating to putting students first (Mann Whitney U = 799; p=.020) and working co-operatively in the School (Mann Whitney U = 840; p=.047), relative to responses from staff in all other Schools. In Physiotherapy staff reported higher levels of observance of excellence in teaching, research and scholarship compared with all other Schools (Mann Whitney U = 403; p=.021). The differences in these two Schools were significant at the .05 level. Given the large number of comparisons, these results may represent true underlying differences between the observance of the values in those Schools, but they may also simply reflect random variation.

The third School, Nursing and Midwifery, was a case where value observance was significantly below responses from all other Schools in five value statements, four of which were significantly different from other Schools at the .01 level. In this School there was a significant difference at the .01 level in four values: Putting students first (Mann Whitney U = 764; p=.001); Working together co-operatively and respecting each other (Mann Whitney U = 392; p=.000); Intellectual freedom and academic integrity (Mann Whitney U = 771; p=.004); and A safe working and learning environment (Mann Whitney U = 731; p=.000). The higher level of significance and that the differences occur across most of the value statements suggests that there is a true underlying difference between staff attitudes about observed values in the School of Nursing and Midwifery compared to staff in all other Schools. This suggests that there should be further consideration of issues in this School.

Figure 5:2 portrays the differences between the types of units and staff in a box plot.

Figure 5:2 Box plot of cumulative value observance



The main differences can be seen in the median scores for the various groups, with School administrative staff having a slightly higher median than the other three groups. The box plot also reveals outlier values with a number of academic staff having quite low scores on value observance. The differences between the various groups are not significant using the Kruskal-Wallis test (4.796; p = 0.187)

Although there were no statistical differences detected between respondents in terms of length of time they had been employed in the University, given the differences between academic and administrative staff, the effect of length of time employed was further explored by analysing responses from School-based academic. Here sufficient observations were received to provide useful analysis (see Table 5.7).

Table 5:7 Observed values in Faculty of Health Sciences for School-based academics by length of time employed: Mean responses and Kruskal Wallis

	Putting students first	Working together co-operatively and respecting each other	Making a contribution to health, health care and society	Excellence in teaching, research and scholarship	Intellectual freedom and academic integrity	A safe working and learning environment
< 2 years	4.06	4.06	4.38	4.50	4.13	4.13
2-5 years	3.39	3.56	4.00	3.71	3.67	3.50
> 5 years	3.47	3.19	3.81	3.50	3.46	3.63
Total	3.57	3.45	3.97	3.76	3.65	3.71
Kruskal Wallis	4.728	6.769*	5.541	13.607*	5.261	3.824
Schools with significant differences in distributions by length of employment	Nursing	Nursing Public Health	Nursing	Nursing Public Health	Nursing	Nursing

* Significant difference between distributions, $p<.05$

It can be seen that there are significant differences in the distributions for the values 'working together cooperatively and respecting each other', and 'excellence in teaching and scholarship', by length of employment in the University or its predecessors. Longer standing employees report lower observance of these values within Schools. The table also shows whether individual Schools exhibited the same relationship. Again, the School of Nursing and Midwifery is distinguished by longer standing staff having a quite different distribution of results from other staff in the School.

These differences may reflect differences in perception of the effect of some of the changes that have occurred in universities since the staff were originally employed at the University. Thus it may be that a significant minority of staff are expressing dissatisfaction with the way universities have developed and harking back to "the good old days" where it is perceived that staff were able to operate more collegially and excellence was valued. Newer staff are much more satisfied with the level of observance for these values, which suggests that the collaborative environment and the emphasis on excellence is consistent with their experiences in other workplaces or with their expectation prior to joining the University.

Difference scores

An important aspect of observance of values in the workplace relates to how important these values are. This interrelationship, analysed through 'difference scores', is the focus of this section. Thus if a value is not observed to a very great extent in the workplace and that value is of little importance to a staff member, it is less important to management than a value that is ranked as not being observed but which is of high importance to the staff member. Difference measures can thus be used to identify areas where a low ranking on the value observance might be of much greater management importance.

The analysis strategy again relies on a nonparametric measure appropriate to ordinal data, Wilcoxon's Z. Wilcoxon measures the difference in how a response is ranked, and is sometimes called the 'signed ranked test'.

Wilcoxon can be used to compare the way a person ranks two sets of items. There are three possible outcomes of any ranking: item 1 ranked higher than item 2, or vice versa, and the two items ranked equally. One direction of the ranking is described as positive, the other negative, giving rise to the name 'signed ranks'. Responses to each of the questions about the importance of the value and the observance of the value in the work unit were elicited on a 5 point Likert scale. These responses can be ranked (5s, followed by 4s, 3s, 2s and 1s) and the ranks of the responses on the two questions compared.

Table 5:8 shows comparison between the stated importance of the values and their observance in the workplace.

Table 5:8 Comparison between stated importance and observance of values in work unit

Value statement	Importance cf Observance	N	Mean Rank	Wilcoxon Z
Putting students first	Negative Ranks	85	53.2	
	Positive Ranks	15	35.0	
	Ties	63		
	Total	163		-7.12
Working together co-operatively and respecting each other	Negative Ranks	113	57.2	
	Positive Ranks	1	97.0	
	Ties	55		
	Total	169		-9.16
Making a contribution to health, health care and society	Negative Ranks	68	46.9	
	Positive Ranks	22	41.1	
	Ties	79		
	Total	169		-4.83
Excellence in teaching, research and scholarship	Negative Ranks	79	47.4	
	Positive Ranks	12	36.9	
	Ties	70		
	Total	161		-6.78
Intellectual freedom and academic integrity	Negative Ranks	92	52.9	
	Positive Ranks	11	44.5	
	Ties	60		
	Total	163		-7.49
A safe working and learning environment	Negative Ranks	78	42.9	
	Positive Ranks	5	27.5	
	Ties	84		
	Total	167		-7.56

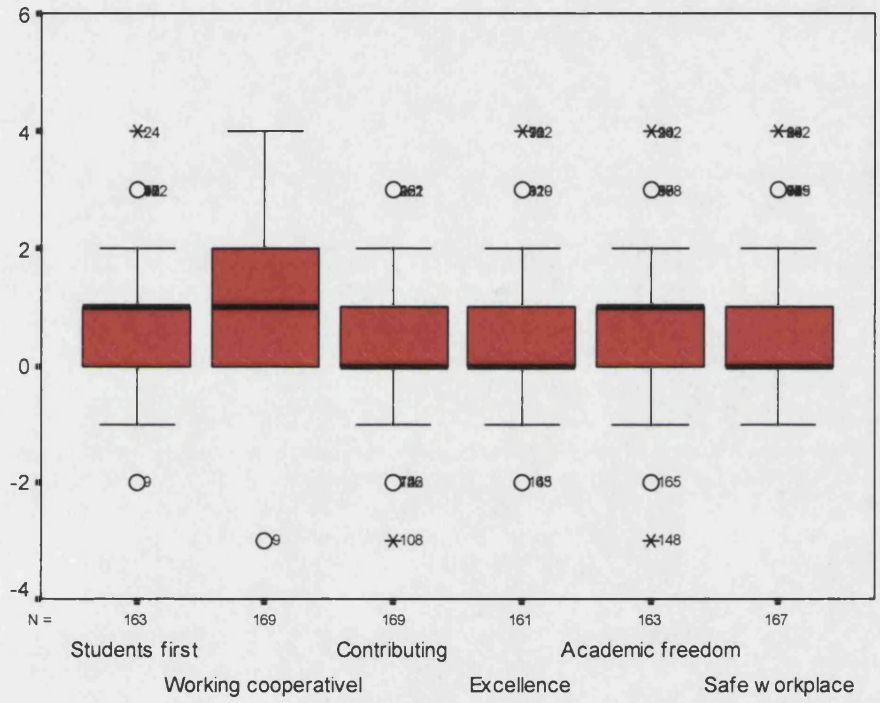
*Negative rank indicates that value observance in the work unit is ranked as lower than importance

Table 5:8 shows the difference comparison in terms of the ranking. For example, in terms of the value putting students first, 163 staff answered both questions relating to how important that value was to themselves personally, as well the extent to which that value was observed in the workplace. 85 of those respondents indicated that the observance of the value was lower than the importance to them of that value, 15 respondents answered that the observance was higher than the importance, and 63 respondents ranked the two values equally. Consistent with previous results the rankings for the value observance is lower than for the importance of value (using Wilcoxon signed ranks test).

The result on the value statement working together cooperatively and respecting each other is particularly noteworthy, where 113 of the 169 respondents ranked the value observance as less than the importance of the value.

Another way of looking at differences is to subtract the observance score from the importance score. Figure 5:3 shows a box plot of the different scores thus created.

Figure 5:3 Box plot of 'difference scores' (importance of value compared to observance of value in the work unit) by value statement



The difference score for working together cooperatively and respecting each other is larger than the other difference scores (there is a significant difference between all of the distributions measured on the Friedman test, $X^2 = 54.8$, $p < 0.01$ and all pair wise comparisons between the difference score for working cooperatively and the other difference scores are significant on a Wilcoxon signed ranks test at 0.01). This highlights the importance of the results from staff about the level of observance for this value statement.

The difference score for working together cooperatively appears to have a wider distribution than the different scores for the other values, that suggests that there is more diversity within the Faculty on this issue between the different workplaces.

However, the Kruskal-Wallis test does not show that there is significant difference between respondents in terms of the type of work unit (see Table 5:9).

Table 5:9 Comparison of difference scores by type of work unit

	Putting students first	Working together co-operatively and respecting each other	Making a contribution to health, health care and society	Excellence in teaching, research and scholarship	Intellectual freedom and academic integrity	A safe working and learning environment
Schools	0.75	1.29	0.41	0.71	0.78	0.78
Research Centres	0.88	0.81	-0.19	0.50	0.76	0.52
Faculty central	0.29	0.86	0.71	0.21	0.43	0.43
Total	0.72	1.19	0.36	0.63	0.74	0.72
Kruskal Wallis	3.03	4.56	8.29*	3.19	0.55	2.01

* Significant difference in mean rank at $p<0.05$

In most cases there are no significant differences between types of work unit in terms of the different scores.

However a visual inspection of the table suggested that there was a significant difference between Schools on the one hand and research centres and Faculty Office on the other in terms of working together cooperatively and respecting each other. Dichotomous analysis indeed proved to reveal a significant difference on the Mann-Whitney U test (Mann-Whitney U = 2150, p = 0.035).

Table 5:10 examines difference scores for individual Schools.

Table 5:10 Difference scores between observed values in Schools in Faculty of Health Sciences and importance of those values: Mean values

School	Putting students first	Working together co-operatively and respecting each other	Making a contribution to health, health care and society	Excellence in teaching, research and scholarship	Intellectual freedom and academic integrity	A safe working and learning environment
Human Biosciences	0.45	0.86	0.41	0.76	0.71	0.59
Human Communication Sciences	0.30	0.80	0.30	0.60	0.60	0.50
Social Work and Social Policy	0.20	0.50	0.40	0.60	0.90	0.20
Orthoptics	1.00	1.50	0.25	0.25	0.75	0.00
Occupational Therapy	0.55	1.18	0.55	0.82	0.55	0.73
Bouverie Centre	-1.00	0.50	0.00	-0.50	0.00	1.00
Public Health	0.71	1.18	0.04	0.50	0.56	0.74
Physiotherapy	0.46	0.77	0.08	0.17	0.17	0.50
Nursing and Midwifery	1.69	2.58	1.04	1.32	1.52	1.58
Total	0.75	1.29	0.41	0.71	0.78	0.78
Kruskal Wallis	30.27**	34.57**	13.61*	16.44*	16.92*	19.61**

* Significant difference between distributions, $p<0.05$

** Significant difference between distributions, $p<0.01$

The table shows a significant difference in the distributions of different scores for each of the value statements, again with the School of Nursing having higher difference scores on every value statement than every other School.

In general the mean difference score is less than 1, suggesting that in most cases there is little difference between the observance of a value and the importance with which that value is rated. On the other hand, there is a mean difference of 2.6 between the importance attached to working together cooperatively and respecting each other in the School of Nursing and Midwifery and the observance of that value in that School. This further highlights issues relating to Nursing and Midwifery that have been identified in the previous tables.

Apart from the School of Nursing and Midwifery and the Bouverie Centre (a very small group within the Faculty) the only situation where difference scores >1 occur involve

the value working together cooperatively and respecting each other and, in the case of the School of Orthoptics, putting students first. In addition to the School of Nursing and Midwifery, three Schools have a difference score of >1 for the value working together cooperatively, namely Orthoptics, Occupational Therapy and Public Health. Given its small size, the differences revealed in the School of Orthoptics may be artefactual. For the other Schools, differences of this size could impact adversely on the operation of the Schools and on morale and retention of staff. Further explanation by School management (and, possibly, by myself as Dean) as to possible reasons for the differences and ways in which collegiality could be improved is warranted in these cases.

Table 5:11 Difference scores in Faculty of Health Sciences by work function: Mean responses and Mann Whitney U

	Putting students first	Working together co-operatively and respecting each other	Making a contribution to health, health care and society	Excellence in teaching, research and scholarship	Intellectual freedom and academic integrity	A safe working and learning environment
Academic	0.85	1.25	0.52	0.96	1.01	0.85
Admin/Tech	0.57	1.17	0.13	0.06	0.28	0.52
Total	0.75	1.22	0.39	0.66	0.77	0.73
Mann-Whitney U	2298	2735	2183*	1332*	1679*	2397

* Significant difference between distributions, $p<0.05$

Table 5:11 shows the different scores by type of work unit. Again the different scores for working together cooperatively are higher than the other difference scores, but there are no significant differences by work function (administrative versus academic staff). Significant differences are found in terms of values about making a contribution to health, health care and society; excellence in teaching, research and scholarship; and intellectual freedom and integrity. These differences were reflected in the earlier analysis and probably reflect a greater emphasis and awareness of academic staff of these issues.

Barriers to adherence to values

As indicated above, staff had an opportunity to indicate in open-ended questions what they perceived as the main factors that might inhibit adherence to the espoused values in the School/Centre/Unit. A common coding frame was used to code this question into a series of categories. As far as possible the language of the staff member was used in developing the categories.

Across all of the open-ended questions (one for each of the six value statements) there were 275 responses from 107 respondents (out of the 169 total respondents). Thirty-three separate categories were used in the analysis, although some dealt with overlapping concepts. Table 5:12 shows the full listing (33 items) of the inhibiting factors for each value statement, ranked by frequency of total responses.

Table 5:12 Frequency distribution of factors identified as presenting barriers to adherence to values in work unit

	Putting students first	Working together co-operatively and respecting each other	Making a contribution to health, health care and society	Excellence in teaching, research and scholarship	Intellectual freedom and academic integrity	A safe working and learning environment	Total
Funding, resources	19	9	12	12	2	2	**56**
Workload	14	9	3	13	3	2	**44**
Commitment	4	5	1	4	7	1	**22**
Time constraints	5	4	3	7	1	1	**21**
Conflicting priorities	6	1	2	4	2	1	**16**
Emphasis on research, publishing	5	3	1	2			**11**
Academic competition	1	9	1				**11**
Managerialism	1	4	3		1		**9**
Students not core business	9						**9**
Leadership		1	1	4	1		**7**
Bullying		2				5	**7**
Stress		1		1		5	**7**
Administrative processes	5	1					**6**
Emphasis on revenue raising, market positioning	1		1	3			**5**
Geography	1	3		1			**5**
Large size classes	3					2	**5**
Air-conditioning						4	**4**
Building design	2			1		1	**4**
Acad-General staff conflict	1	2					**3**
Communication		2		1			**3**
Training				2		1	**3**
Market forces					2		**2**
Govt interference			1		1		**2**
Morale		2					**2**
Part-time staff		1	1				**2**
Theft						2	**2**
Hierarchical structure		1					**1**
Skill mix		1					**1**
Staff turnover	1						**1**
Car parking/lighting						1	**1**
Blocked hallways						1	**1**
Lack of Medical School			1				**1**
Reward system				1			**1**
Total	**78**	**61**	**31**	**56**	**20**	**29**	**275**

A cluster of concepts relating to funding, workload and time constraints is seen as being a significant factor that inhibits adherence to values across most value

statements. The most frequently identified category related to funding and resource issues, identified by 56 respondents across the six value statements (20% of all identified inhibiting factors). Workload, coded as a separate category, was identified by a further 44 respondents and time constraints by a further 21 respondents. These latter two categories are, in a sense, caused by funding constraints and could be seen as symptoms of an underlying problem. A total of 131 respondents identified issues from this cluster of categories as presenting a barrier to adherence to the espoused values. They represent 48% of all responses to identified barriers.

Importantly, there were 22 mentions of a commitment by the University to these espoused values as also being a factor that inhibits adherence to the espoused value at the work unit level.

In terms of putting students first, the most frequently identified categories again related to funding and resources. Taken together with the related concepts of workload and time constraints, 38 respondents, or almost half, identified this issue as being a significant factor affecting adherence to this value. Factors exogenous to the work unit, such as commitment by the University, administrative processes and managerialism, were less frequently mentioned.

Inhibiting factors relating to working together co-operatively and respecting each other were perceived to be similar to both the overall pattern and the responses to putting students first. Twenty-two respondents, over one-third of all respondents who identified barriers to adhering to this value, cited factors associated with resource constraints. The modal value in terms of inhibiting factors for this value statement was nine. Interestingly, academic competition also appeared here as a modal response. This category groups together responses of the following kinds:

- competition and success are rewarded, concern for others is not (Level A/B staff member)
- academic "traditions", competitive environment (Level D/E staff member);
- competition beats cooperation on most occasions (Level D/E staff member).

About one-third of respondents who identified factors preventing adherence to the value making a contribution to health, health care and society identified the resource factors (18 of the 31 respondents).

Three respondents identified the category related to managerialism. This category incorporates responses such as:

- bureaucratic and hegemonic self interest of University (Level B staff member);
- conflict between managerialism (money making; not upsetting tenders; pseudo efficiency; focus on outputs) and academic values (time to reflect; doing a job well; ability to speak out without fear or favour) (Level C staff member);

No other factors were identified by more than two respondents

Fifty-six respondents identified factors preventing adherence to the value about excellence in teaching, research and scholarship. Again funding and resource issues rated highly here, with 32 responses, about two-thirds of respondents, identifying the three related factors.

Financial issues did not dominate responses to the value related to intellectual freedom and academic integrity. Here the modal response, one-third of the 20 respondents, related to commitment from the University. Typical comments grouped to this category were:

- This does not appear to be strongly espoused or required within the University (Level C staff member);
- Lack of encouragement, support to pursue activity that allows these things to evolve (Level A/B staff member).

Twenty-nine people identified factors that inhibit adherence to the value statement of a safe working and learning environment. Specific resource constraint categories did not dominate here, but rather the modal responses were associated with categories related to bullying and stress in the workplace.

A number of respondents provided specific examples of factors that impede a safe working environment, such as air-conditioning (some parts of the Health Sciences buildings can be extremely hot in summer). A related category of building design might also refer to this problem. Other specific factors such as theft were also mentioned.

Discussion

As hypothesised in research aim 5, differences were found in value adherence across different organisation units with the School of Nursing and Midwifery showing results significantly different from other Schools. This issue is explored further in chapter 7.

The emphasis on the resource-related categories as factors presenting barriers to adherence to the values is understandable in the context of a fiscally-constrained University environment and government requirements to absorb wage increases through productivity and consequential increased student: staff ratios. However, this emphasis on resource constraint deflects attention from implicit choices made by individual academics or their work units about priorities and value choices.

The most obvious example of this relates to the value, putting students first. This is a value about relative priority of students over other aspects of the job role (including, in the case of academics, research and making a contribution to health, health care and society). In the job context, setting a relative priority to advantage students can occur in any environment regardless of the nature of resource constraints.

In most cases students would have a better university experience if there were a better student: staff ratio and more resources were available to support the learning and teaching endeavour. It may be that staff are revealing a frustration about resource constraints and feel that they could do a better job in different financial circumstances. However, as indicated above, the relative priority to students in the job role should not be affected by resource constraints.

The responses might also stem from issues about the work-home balance. Although the question was phrased as being about the work unit, respondents might still have been reflecting implicit concerns that they are not able to devote more attention to students without impacting adversely on their home situation. This hypothesis cannot be explored, given the design of the questionnaire.

Similarly, 11 respondents identified "conflicting priorities and an emphasis on research and publishing" as reasons why the value of putting students first was not adhered to in their work unit. Conflicting priorities is the essence of this particular value statement as it is phrased as a priority. It is a choice of the work unit.

Similar arguments about the effect of resource constraints also apply to adherence to the value working together co-operatively and respecting each other. Again, a co-operative work environment should not be affected by resource constraints, frustrating as they may be.

The responses about academic competition suggest that the individual focus of reward structures in universities is an important inhibiting factor in adherence to the value statement about co-operative working. It will be recalled that this value was the one that was most important to staff across the Faculty. Academic competition and recognition of individual excellence may to some extent be intrinsic to the nature of academic work. However, increasingly, research funding agencies are rewarding co-operative and collaborative research and so the reward structures may not be as orthogonal to the desired work environment of the future as they might have been in the past.

The phrasing of the value "excellence in teaching, research and scholarship" is not one about relative importance and so the responses that highlight resource constraints are identifying a factor that could impede achieving excellence. However, the value statement questions are about whether the work unit *values* excellence, not the extent of achievement, and hence it is questionable whether resource constraints are truly relevant inhibiting factors.

Overall, the general pattern of responses to factors identified as presenting barriers to adhering to values in the work units in the Faculty show an emphasis on exogenous factors such as funding and resources, rather than factors that are amenable to change within the work environment. The most notable exception to this generalisation relates to the factors inhibiting adherence to the value of a safe working and learning environment, where endogenous factors such as bullying and stress represented modal values.

Chapter 6: Observed Values within the University

This chapter reports on a further component of the values questionnaire: addressing adherence to the value statements in the wider University. Differences between value adherence in the immediate work environment and the wider University are identified. Although differences between groups of staff were examined, no differences between groups were hypothesised and such differences were not generally apparent.

In previous chapters I reported on the values held by staff in the Faculty of Health Sciences, and on the extent to which these values were observed in the work unit. This chapter reviews the extent to which these same values are observed in the University as a whole, using the same response scale ranging from 1 (to a very small extent) to 5 (to a very great extent).

It will be recalled that our theoretical model, as articulated in chapter 1, hypothesises that environmental impacts on values on employees are mediated by University-wide issues and the immediate work environment. This chapter reports on the impact of the University-wide environment, and also reports on differences between value observance at the University-wide environment and the immediate local environment. A number of factors are of interest here, including whether this distinction between impacting factors is relevant and whether staff can distinguish between a local environment and the wider environment.

Table 6:1 shows the frequency distribution of observed values, the result of the Kolmogorov-Smirnov Z test and the number of valid responses.

Table 6:1 Extent to which value statements are observed in the University as a whole

	Frequency Distribution (Percent)					Mean response	Kolmogorov-Smirnov	Valid N
	1 *Very small extent*	2	3	4	5 *Very great extent*			
Putting students first	4	19	63	62	11	3.36	2.87	159
Working together co-operatively and respecting each other	10	30	79	39	4	2.98	3.33	162
Making a contribution to health, health care and society	5	23	60	58	15	3.34	2.68	161
Excellence in teaching, research and scholarship	4	8	58	63	24	3.61	2.81	157
Intellectual freedom and academic integrity	2	17	53	59	20	3.52	2.78	151
A safe working and learning environment	3	14	41	64	32	3.70	3.04	154

The results of the Kolmogorov-Smirnov test again suggest that non-parametric statistics should be used for the analysis of these value statements in this chapter.

It can be seen that the modal response for three of the value statements (putting students first; working together co-operatively and respecting each other; making a contribution to health, health care and society) is the mid-point of the scale with the mode for the remaining three value statements being at the fourth point on the 5-point Likert scale. The modal response for the University as a whole is thus somewhat lower than for the extent of value observance in the work unit. This has positive and negative connotations. On the one hand it is positive in the sense that the work unit has a very important influence on the working life of the staff member and so a higher level of value observance is to be welcomed; on the other hand it is negative because the value statements all reflect values of high importance to the staff. The fact that these values do not appear to be observed to the same extent as they are in the work unit should be of concern.

There is a significant difference between the rankings of extent of value observance in the University (Friedman $x^2 = 81.7$; $p = .000$). Table 6:2 shows bi-variate comparisons.

Table 6:2 Comparison between rankings of value observance in the University

	Putting students first (1)	Working together cooperatively and respecting each other (2)	Making a contribution to health, health care and society (3)	Excellence in teaching, research and scholarship (4)	Intellectual freedom and academic integrity (5)	A safe working and learning environment (6)
Putting students first (1)		1>2			5>1	6>1
Working together cooperatively and respecting each other (2)			3>2	4>2	5>2	6>2
Making a contribution to health, health care and society (3)				4>3		6>3
Excellence in teaching, research and scholarship (4)						
Intellectual freedom and academic integrity (5)						

The table shows the relationship between values indicated by row and column numbers. Only relationships (rankings) with significant differences < .01 on Wilcoxon signed ranks test are shown.

Observance of the value working together cooperatively and respecting each other is rated lower than observance of all the other values at the University level (statistically significant on Wilcoxon signed-ranks test). Putting students first as a value is rated lower than intellectual freedom and academic integrity and a safe working and learning environment. The observance of making a contribution to health, health care and society is rated lower than observance of excellence in teaching, research and scholarship and a safe working and learning environment.

Table 6:3 shows the mean response for the extent of value observance in the University as a whole compared with value observance in the work unit.

Table 6:3 Comparison of extent to which values are observed in the University as a whole and in the work unit (School, Centre)

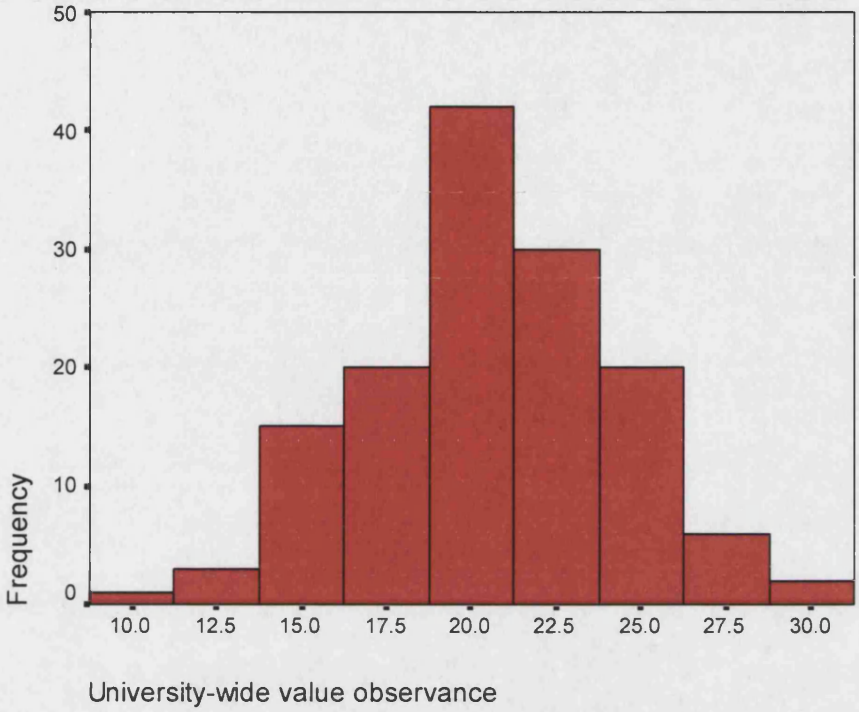
	Mean Response		Wilcoxon Signed Ranks Test
	University as a whole	Work unit	
Putting students first	3.36	3.74	-4.2
Working together co-operatively and respecting each other	2.98	3.62	-5.55
Making a contribution to health, health care and society	3.34	4.04	-6.83
Excellence in teaching, research and scholarship	3.61	3.96	-4.10
Intellectual freedom and academic integrity	3.52	3.85	-3.55
A safe working and learning environment	3.70	3.94	-3.49

Using the non-parametric Wilcoxon Signed Ranks Test, the differences between the distributions are statistically significant for all value statements with all differences being statistically significant at $p < .001$.

Cumulative scores

Again, a continuous variable was created to measure the observance of values at the University level (see Figure 6:1)

Figure 6:1 Frequency distribution of cumulative University-wide value observance



The cumulative University-wide value observance score is less skewed than the cumulative scores for either importance of values or value observance in the work unit. The mean median and mode are almost identical (20.5, 20.0, 19.0 respectively) and the distribution is not significantly different from the normal distribution on a Kolmogorov-Smirnov test (z = 0.879).

Differences between staff

In terms of differences between staff, academic staff report a lower level of value observance for the value putting students first (mean for academics 3.22; administrative/technical 3.60; Kruskal Wallis = 7.7, p = .005). This difference could reflect differences in roles of administrative and academic staff, with academic staff being closer and more aware of the University's commitment to putting students first.

There are no statistically significant differences between the extent of value observance for the other values based on the type of staff, nor differences in terms of the work unit (School versus Research Centre), between Schools, or based on length of employment within the University (on Kruskal-Wallis test). Similarly there are no

statistically significant differences between the cumulative measure of University-wide value observance and any of the classificatory measures.

Difference measures

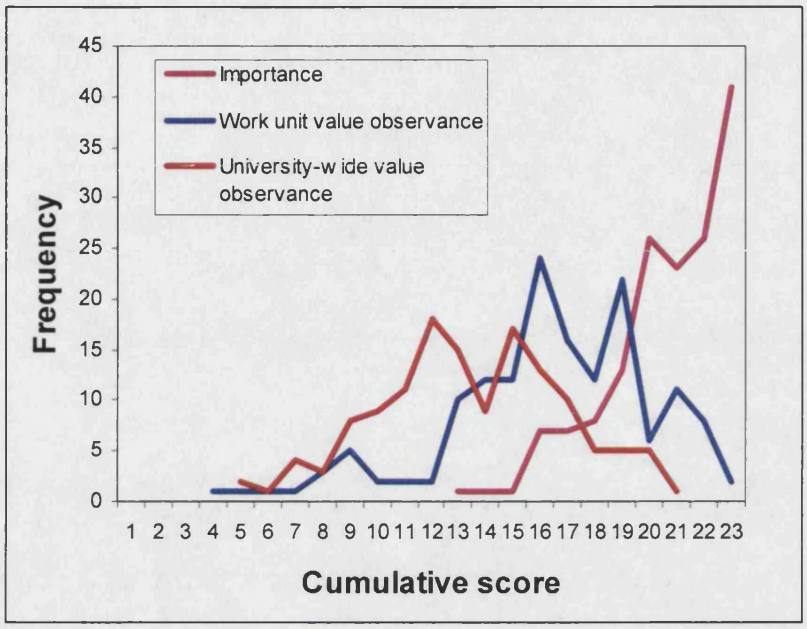
There is a significant difference between the ranking of the stated importance and the observance of the values for each of the value statements (see Table 6:4).

Table 6:4 Comparison between stated importance and observance of values in the University

Value statement	Importance cf Observance	N	Mean Rank	Wilcoxon Z
Putting students first	Negative Ranks	116	62.4	
	Positive Ranks	6	43.2	
	Ties	37		
	Total	159		-9.16
Working together co-operatively and respecting each other	Negative Ranks	151	76.5	
	Positive Ranks	1	81.5	
	Ties	10		
	Total	162		-10.72
Making a contribution to health, health care and society	Negative Ranks	112	63.5	
	Positive Ranks	10	39.0	
	Ties	39		
	Total	161		-8.81
Excellence in teaching, research and scholarship	Negative Ranks	104	59.6	
	Positive Ranks	10	35.3	
	Ties	41		
	Total	155		-8.49
Intellectual freedom and academic integrity	Negative Ranks	101	56.7	
	Positive Ranks	9	41.7	
	Ties	41		
	Total	151		-8.17
A safe working and learning environment	Negative Ranks	94	48.9	
	Positive Ranks	3	50.8	
	Ties	57		
	Total	154		-8.23

The difference in distributions can also be seen visually in Figure 6:2 that shows the different frequency distributions of the cumulative importance scores and the value observance scores at work unit and University level.

Figure 6:2 Frequency distributions of cumulative importance and value observance scores



The importance scores are highly skewed to the left, with the work unit values scores also skewed but not to the same extent. The measures of central tendency are much higher for the importance score compared to the work unit value score, with measures of central tendency toward the University-wide observance being much lower than the other two distributions(see Table 6.5. These differences in distributions are statistically significant using Friedman's test, χ^2= 186, p<0.01)

Table 6.5 Measures of central tendency of cumulative importance and value observance scores

	Importance of value statements personally	Work unit value observance	University-wide value observance
Mean	27.49	23.13	20.50
Median	28	23	20
Mode	30	23	19
Mean rank	2.85	1.89	1.25

Although the maximum score on both distributions of value observance was 30 (and this score was used by two respondents in both cases), in contrast to the 12% of respondents who reported a cumulative work unit value observance of less than 20, 41% of respondents reported a University-wide value observance of less than 20. This

reflects both the much lower level of value observance and also the wider spread of responses. Similarly 3.9% of respondents reported work unit value observance of less than 15, compared to 7.9% of respondents reporting University-wide value observance less than 15. The distributions thus show a fairly wide spread (also shown visually in Figure 6.2). This relative lack of homogeneity in terms of University-wide observance suggests that, although Faculty staff report lower levels of value observance in the University as a whole, there is still significant heterogeneity of views across the Faculty on this issue.

A difference score, measuring the difference between the stated importance of each of the value statements and the reported observance of those values in the University, was calculated for each value statement. Table 6:6 shows analysis of difference scores between the importance and University-wide values for each of the value statements, classified by function.

Table 6:6 Difference scores in Faculty of Health Sciences by work function: Mean responses and Mann Whitney U

	Putting students first	Working together co-operatively and respecting each other	Making a contribution to health, health care and society	Excellence in teaching, research and scholarship	Intellectual freedom and academic integrity	A safe working and learning environment
Academic	1.22	1.93	1.20	1.31	1.29	0.99
Admin/Tech	0.98	1.69	0.81	0.45	0.54	0.85
Total	1.14	1.84	1.07	1.02	1.04	0.94
Mann-Whitney U	2169	2326	2174	1309*	1523*	2366

Again, the mean difference score on working together cooperatively approaches two points on the Likert scale for this value statement, suggesting quite a significant dissidence between the importance and the observance. There are significant differences between academic and administrative and technical staff on only two of the value statements - excellence in teaching and intellectual freedom – possibly again reflecting the difference salience of those values to the different groups of staff. There were no significant differences between the different scores for the type of work unit.

Conclusion

The overall pattern revealed here is that the extent of value observance of these values is significantly lower at the University-wide level than it is within the Faculty. Importantly, values that are ranked highly by staff are not seen to be observed in practice within the University. These differences are across all types of staff and all work settings.

It is also important to note that there is a significant difference in the results for value observance at the local level and at University-wide level. The staff can therefore clearly distinguish between different levels of the University (at least making a distinction between their local work environment and the wider environment).

The mean responses are generally more than half a point different on the Likert scale between the work unit and University as a whole and the mean responses for all except one of the questions are between the mid point and the fourth point of the Likert scale. This does not augur well for the University, with the cumulative observance scale having some very low scores indeed.

For one question, namely the value of working together cooperatively and respecting each other, the value observance is below the mid point of the Likert scale. This should be of great concern. There could be a number of reasons for this low score. The first part of the value statement is about working together cooperatively, and it may be that staff in the Faculty of Health Sciences do not observe a great deal of collaboration outside their own work unit. Although much of modern research encourages collaboration between disciplines, this has not been a characteristic of the Faculty of Health Sciences, and this may be reflected in the observance of this value statement. The management response to this issue could then be promoting inter-faculty collaboration and partnerships with other Schools in the University.

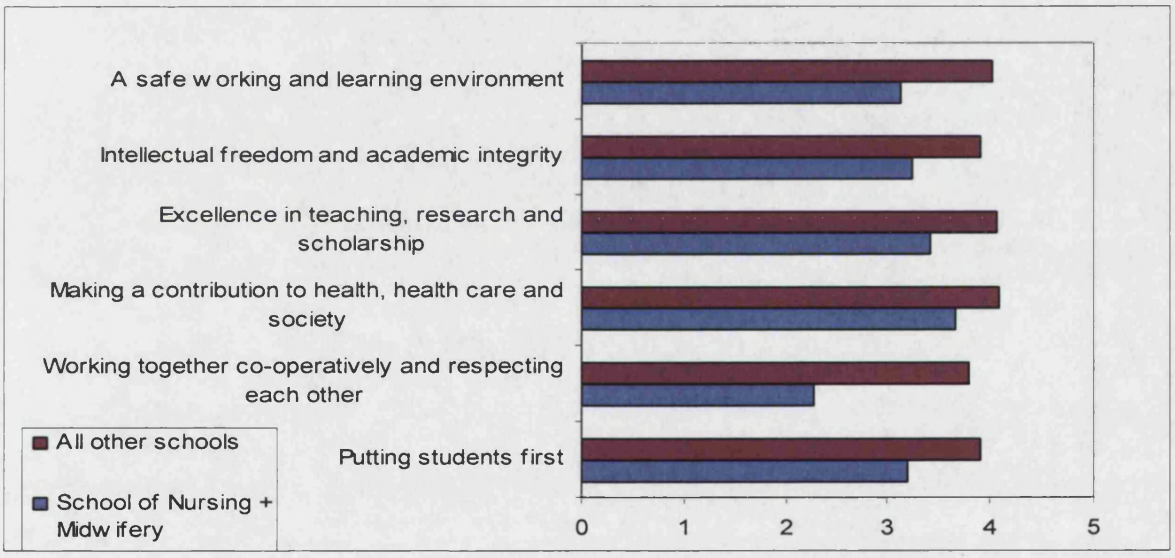
On the other hand, if the low score is emphasising the "respecting each other" component of the value statement, this is extremely serious. Interpretation based on this component of the value statement would suggest a need for work on changing behaviours across the University. This is, of course, very difficult, requiring both training and modelling changes.

Chapter 7: The Special Case of the School of Nursing and Midwifery

Staff from the School of Nursing and Midwifery were identified in previous chapters as reporting significantly different value observance compared to staff in other schools. In this chapter I look more closely at the School, to examine differences within the School and discuss management responses to the observed differences.

In previous chapters I have reported on the espoused and observed values in the Faculty of Health Sciences. I noted that the observance of most of the value statements in the School of Nursing and Midwifery was significantly below that of all other Schools in the Faculty (see Figure 7:1). In this Chapter I report on the School of Nursing and Midwifery as a case study of attempting to use the values questionnaire in the management of the Faculty of Health Sciences.

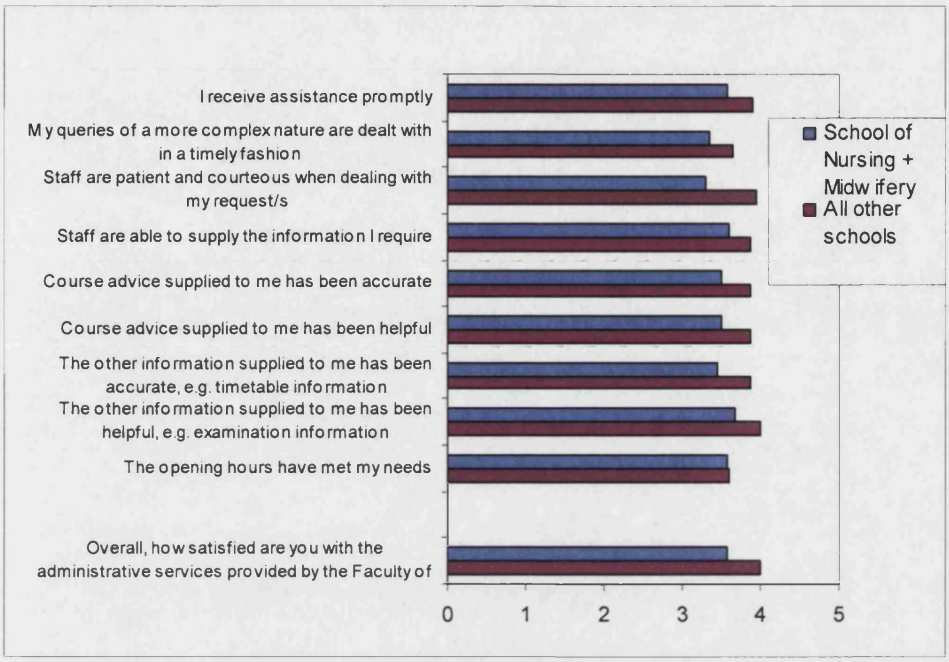
Figure 7:1 Observed values in the School of Nursing and Midwifery compared to all other schools, 2003



These differences came as no surprise to me as I had received informal feedback about problems in the School over the previous twelve months. The questionnaire results gave some 'objective' evidence that there was something about the School of Nursing and Midwifery that needed to be explored further.

In parallel with the evaluation of value adherence, a questionnaire was undertaken by administrative staff in the Faculty of student perceptions of the quality of administrative support offered by the various School offices. The results for the School of Nursing and Midwifery compared to all other Schools are summarised in Figure 7:2.

Figure 7:2 Student perception of administrative support in School of Nursing and Midwifery compared to all other schools, 2004



It can be seen that students in the School of Nursing and Midwifery report mean satisfaction with administrative issues that is below that of all other Schools. These differences are statistically significant for each of the questions.

More detailed analysis of the School of Nursing and Midwifery results suggested that there was a significant difference in the observance of values between academic and administrative staff in the School of Nursing and Midwifery on only one value, namely valuing excellence in teaching and research (Mann Whitney U = 32, p = .037). The mean response for academics was 3 on the 5-point scale, with administrative staff having a mean response of 4.13. There may be legitimate reasons for the differences in perceptions on this value, namely that the emphasis on excellence in teaching and research plays out more directly in the working life of academic staff and they are thus more acutely aware of whether the value is really embedded in the culture of the organisation, or not. However it is difficult to know how to use this piece of information. There were no statistically significant differences in value observance between academic staff according to their level of appointment.

Staff who had been at the University longer had a somewhat less positive view of value adherence. Table 7:1 shows the results of perceived value adherence based on the length of employment at the University.

Table 7:1 Observed values (mean) in the School of Nursing and Midwifery by length of employment in the University

Period employed at University	Putting students first	Working together co-operatively and respecting each other	Making a contribution to health, health care and society	Excellence in teaching, research and scholarship	Intellectual freedom and academic integrity	A safe working and learning environment
< 2 years	3.86	2.86	4.14	4.29	4.14	3.86
2-5 years	3.14	2.29	3.86	3.86	3.43	3.14
6-10 years	2.60	2.00	3.20	2.60	2.25	2.60
> 10 years	2.50	1.25	3.25	2.00	2.00	1.75
Total	3.13	2.22	3.70	3.39	3.18	3.00
Kendall's τ	-0.524*	-0.450*	-0.283	-0.582*	-0.621*	-0.499*

* Significant correlation <0.01

It can be seen that generally staff that have been employed longer at the University are seeing less value adherence. Except for the value, making a contribution to health, health care and society, increasing employment at the University was associated with a reduced perception that core values were observed in practice. For the five value statements that showed this pattern, the effect was monotonic: for each length of service category, people in the next longest category reported lower value observance.

As shown in Chapter 4, this finding about the effect of length of employment on perceived value observance was generally not replicated in other Schools. Within the School of Nursing and Midwifery the differences are stark, with more than a two point difference on the Likert scale between responses from staff with more than ten years experience and those with less than two years experience on three of the six statements. Differences on the other three value statements exceeded one point on the Likert scale.

Perceived barriers to goal adherence

Staff were asked to identify barriers to goal achievement. Comparison of patterns and responses here is difficult, in part because of the large number of categories and small number of respondents (eg. in terms of barriers to adhering to the value of putting students first, there were only 16 responses from the School of Nursing and Midwifery).

On visual inspection the pattern of responses for the barriers to goal adherence were very similar between respondents from the School of Nursing and Midwifery and respondents in other Schools. However, in terms of the value associated with valuing excellence in research and teaching, there was a statistically significant difference between the identified barriers nominated by staff of the School of Nursing and Midwifery and other Schools (contingency coefficient = .569, p approximately .042). These results are shown in the Table 7:2.

Table 7:2 Perceived barriers to adherence to valuing excellence in teaching and research

	School of Nursing	All other Schools	Total
Leadership	1	2	3
Emphasis on research, publishing	0	2	2
Emphasis on revenue raising, market positioning	1	0	1
Commitment	3	0	3
Funding, resources	0	8	8
Workload	5	8	13
Conflicting priorities	0	4	4
Time constraints	1	5	6
Training	0	1	1
Stress	1	0	1
Geography	0	1	1
Building design	0	1	1
Reward system	0	1	1
Total	**12**	**33**	**45**

One interpretation of the differences here might be that the School of Nursing and Midwifery appears to be seen to have a lower commitment to this value (from the leadership), possibly due to an emphasis on revenue raising and market positioning, although these results, of course, can only be tentative. An alternative explanation may be that the differences between the School of Nursing and Midwifery and other Schools are driven by the greater emphasis in other Schools on exogenous factors such as funding, rather than the endogenous emphasis on leadership and commitment in the School of Nursing and Midwifery.

In terms of a safe environment, four of the eight respondents who mentioned particular barriers mentioned bullying as a barrier to a safe environment; no respondents from other Schools in the Faculty mentioned this as a barrier. This suggests that bullying may be a particular issue within the School.

Value adherence in the University

The respondents from the School of Nursing and Midwifery appeared to judge value adherence in the rest of the University in the same way as respondents from other Schools in the Faculty. There was only one value statement where there was a significant difference between respondents from the School of Nursing and other Schools, and that related to making a contribution to health, health care and society, where respondents from the School of Nursing and Midwifery felt that there was a greater degree of value observance in the University than respondents from other Schools (mean on the 5 point Likert scale of 3.73; in the School of Nursing and Midwifery compared to 3.29 in all other Schools; Mann Whitney $U = 943$, $p = .044$). There is no apparent reason for a difference between respondents from the School of Nursing and Midwifery and other Schools on this value, so this results leads to no specific course of administrative action.

Using the data

These results suggest that the School of Nursing and Midwifery is different from other Schools. The questionnaire was used to provide a "conversation starter" within the School. In particular, the results from the questionnaire about value adherence were used for management purposes.

As Dean of the Faculty of Health Sciences, I convened a meeting of the leadership group of the School of Nursing and Midwifery. This consisted of the Head of School, the Deputy Head of School, the School Administration Manager and the Professors of the School, a total of seven people. I presented the two figures as shown above to the meeting and used it as an opportunity to discuss staff and student perceptions of the *modus vivendi* of the School. In particular, I highlighted the significant differences between the School of Nursing and Midwifery and other schools on reported observance of value statements such as working co-operatively, and suggested that the School needed to address those issues. It was agreed at that meeting that I

should address a full School meeting on this issue, which I did, presenting the same data.

The purpose of these meetings was to highlight to the School leadership and staff the need for change in relationships within the School. Such a change in relationships required a totally different approach to management and leadership (although this is not all that is required). A more inclusive approach to School management was advocated: strengthening opportunities for staff involvement in consultation.

Although the incumbent Head of School had a number of strengths, her management style was clearly not seen as contributing positively to the culture. It is a moot point whether any structural changes implemented would have by themselves been sufficient to achieve the necessary changes within the School. Accordingly, a proposed merger of the School with the group responsible for teaching nursing on the Bendigo campus of the University (part of a different Faculty) provided the opportunity for leadership change by appointing a new of Head of School (from outside the existing staff) to 'start afresh' with a new management, management style and structure.

Conclusion

It is clear from the data reported in this chapter that there were significant differences between the School of Nursing and Midwifery and other Schools, not only as measured in the values questionnaire but in the survey of students. The staff and leadership group discussions did not lead to articulation of any particular reasons for the differences.

Leadership is an important contributing factor to creation of a work climate and the modelling and transmission of appropriate behaviours. The amalgamation of units of the Faculty of Health Sciences with units of the Faculty for Regional Development (referred to in chapter 2) meant that there was an opportunity to change the structure and leadership of the School of Nursing and Midwifery. The values questionnaire highlighted the importance of doing so.

But use of the questionnaire in this way raises again the issues of power relations canvassed in Chapter 2. The questionnaire was distributed from the Faculty office, a centre of power in the Faculty. The response rate from the School of Nursing and

Midwifery was 37%, approximately the same as the overall response rate. I had confidence in the use of the survey data, partly because the survey findings were consistent with previous informal feedback and partly because they were reinforced by the student survey results. This triangulation also meant that I was not relying on one data source alone for my actions.

Data collection for its own sake should be eschewed. Researchers have an ethical obligation to act on research results, normally through publication dissemination. Staff who complete management-initiated questionnaires of this kind might reasonably have an expectation that results will be used: that problems revealed would be addressed through management action. Thus the fact that the questionnaire was distributed from an authoritative source reinforces the need for action on the results.

Part III

Conclusions

Chapter 8: Conclusion 1- Overview and Implications for the Faculty of Health Sciences at La Trobe University

This chapter is the first of two 'conclusions' chapters. It reviews the findings of the "results" chapters (Chapters 4-7), summarising the key conclusions and, as appropriate in a Professional Doctorate, identifying implications for the Faculty of Health Sciences and La Trobe University.

The study of values in the Faculty of Health Sciences reported here was designed as part of a Faculty planning process to inform management about the values of staff and their observance within the Faculty. As was argued in Chapter 1, the culture and values of an organisation can impact on an employee and the value fit between the values of the organisation and the values of the employee can be an important factor in motivating or de-motivating the employee.

When discussing and analysing the values of an organisation, one must look at more than the espoused values of the organisation (measured by 'words' in Hofstede's typology used in Table 2.1), but one also must look at the way in which these values are played out in practice (as measured by deeds). The analysis of values in the Faculty of Health Sciences analysed deeds through measuring perceived value observance: the extent to which staff in the Faculty felt that the espoused values were observed and practised. As was argued in Chapter 1, the culture and values of the organisation play out both in the immediate management environment of an employee and in the wider organisational environment at University level.

The Faculty values questionnaire reported here was the first such questionnaire within the Faculty of Health Sciences at La Trobe University (indeed the first such questionnaire in any part of La Trobe University and no reference to similar questionnaires has been found in the literature).

Limitations

Before discussing the conclusions and implications of this study, it is worthwhile outlining the study limitations.

First, it should be recalled that the response rate for the survey was 39%. There is a risk that respondents to the questionnaire are not representative of all staff in the Faculty and hence the findings reported here do not truly reflect the perceptions of

staff. It could be that staff who identify less with the value statements or with more negative perceptions of value adherence felt so alienated that they did not respond, thus skewing results in the positive direction. Busier staff might also have felt unwilling to devote time to this endeavour, thus affecting reporting of perceived inhibitors.

Secondly, the study was cross-sectional, undertaken at one point in the history of the Faculty. We have no information as to the stability of responses from individuals nor the extent to which perceptions of staff change over time.

Thirdly, this was a study in one Faculty in one University. La Trobe University faculties based in different disciplines may have differing value emphases and differing perceptions of value adherence in the University as a whole. Care thus needs to be exercised in assuming that Faculty of Health Sciences' staff perceptions reflect those of all staff in the University.

Fourthly, this has been a quantitative study presenting a 'snap shot' of staff perceptions and exploring reported differences in those perceptions. It does not, for example, provide the rich data that could be obtained from qualitative work exploring reasons for differences between staff or organisational units.

Fifthly, the questionnaire was distributed in a particular context of power relations. The questionnaire was conceived and initiated by me as Dean of the Faculty of Health Sciences and the responses were from staff who were directly or indirectly accountable to me. The ethical issues associated with this were canvassed in Chapter 2 and involved appropriate clearance by the Human Research Ethics Committee.

The issue of power was dealt with prospectively through the ethics process discussed in Chapter 2. In retrospect it is possible to claim that relative power did not appear to influence the results. This can be seen in a number of ways. As discussed in Chapter 2, the questionnaire went through several iterations both in terms of the values statements and the questionnaire design. This suggests that staff within the Faculty had enough confidence in their ability to critique the value statements and the questionnaire design that any power and 'halo' effects were mitigated.

The 39% response rate also suggests that power effects were mitigated. The fact that the response rate was at the low end of acceptable could suggest that staff felt no obligation to respond to the questionnaire despite two follow-ups. This could possibly be interpreted as perceived problems of lack of confidentiality. However, the open

ended responses were quite robust, for example identifying bullying, and the responses also revealed differences between schools. Together this suggests that the respondents were honest in their responses, again giving confidence that power effects did not impede honest answering of the questionnaire. Despite these comments, these power issues need to be considered in the overall interpretation of the questionnaire.

Despite these limitations, it is felt that the questionnaire has produced useful data but the limitations probably suggest that management action based on these findings should be cautious. Managers utilise multiple sources of information in making their decisions. The values questionnaire provides a useful snapshot of perceptions of staff from across the Faculty. The more management intervention impacts adversely on careers, the more the information base for those decisions needs to be accepted, overt and replicable. Many of the actions recommended in this chapter are about embedding the value statements in the processes of the Faculty. Despite the limitations outlined above, this type of action can be supported by the findings of the questionnaire and would be accepted by staff. Interventions to change culture and leadership also identified in the previous chapter, need triangulation and additional support. Thus implementation of these findings needs to give due weight given to potential negative impacts of any proposed changes.

The reflections and recommendations outlined below are made in that context.

Summary of achievement of the aims of the study

The aims of the study were outlined in Chapter 1:

AIM 1. To measure and report on espoused values within the Faculty of Health Sciences at La Trobe University (with an expectation that a consultative process to develop value statements will yield high levels of support for those statements)

AIM 2. To measure and report on value adherence within the Faculty of Health Sciences at La Trobe University.

AIM 3. To test the hypothesis that there will be differences in espoused values between the different Schools and between different types of organisational units (Schools vs research centres vs Faculty Office)

AIM 4. To test the hypothesis that there will be differences in espoused values between different types of staff (academic vs administrative)

AIM 5. To test the hypothesis that there will be differences in value adherence between organisational units (reflecting the effect of different leadership, culture etc).

Research aims 1 and 2 were achieved with results being analysed and reported back to the regular meeting of Heads of School and sent to all staff in the Faculty. In a number of cases Heads of School also scheduled the feedback reports for discussion at School meetings. I received relatively little feedback from staff, apart from acknowledgement and thanks for taking the time to report back on the questionnaire. The only substantive feedback received related to Report 2 about observed values in the work unit. In the penultimate paragraph of that report there is acknowledgement that staff feel frustrated with respect to resource constraints on their work, and that report reiterates the view that this value is "expressed as a relative priority rather than an absolute achievement". Staff in one of the Schools reiterated to me that the absolute time available for staff is limited and affected by the demands of students and the University in terms of research. Staff in this School felt that it was impossible to give students as much as they would wish and still meet the other formal demands of their job.

In line with research aim 3, differences were found in espoused values between types of organisational units and minor differences were found between Schools (although the study design did not allow for exploration of the reasons for between-School differences. As hypothesised in research aim 4, differences were found in espoused values between different types of staff. (The results about identification with the values and about value adherence are discussed further in the next two sections of this Chapter).

In line with research aim 5, differences were found between Schools, with the School of Nursing and Midwifery being significantly different from all other Schools.

Identification with values

As was described in Chapter 1, the core set of values incorporated in the values questionnaire had been developed through an ever-widening circle of participants, but essentially represented a top-down approach to identifying values. A small group

(Dean, Deputy Dean and Faculty Registrar) developed the initial value statements. The development group expanded with consultation with Heads of School, and then widened further with consultation with staff. This process led to a set of value statements, all of which were ranked as extremely important by a majority of staff within the Faculty (see Table 8:1 for a summary of findings from the questionnaire).

But the decision-making processes of the Faculty and Schools and their consultation processes give academic staff within Schools a greater voice in decision-making than administrative staff and Schools a greater voice than Research Centres. As a result, some of the values were not seen as important by administrative staff compared to academic staff. In particular, three of the six values were ranked as more important by academic staff compared to administrative staff:

- making a contribution to health, health care and society;
- excellence in teaching, research and scholarship;
- intellectual freedom and academic integrity.

These differences may in part be able to be explained because of the relative roles of academic and administrative staff. But administrative staff have an important contribution to make to the overall academic endeavours of the University. Significant differences in values between academic and administrative staff may make the development of a cohesive work unit more difficult for School or University leadership. Similarly, significant differences between academic and administrative staff may reflect differences in culture between the two groups that may mean that administrative staff do not understand the importance of practices and procedures proposed by academic staff (or vice versa) for the management and strategic direction of an organisational unit.

For example, academic staff placed a higher importance on the value making a contribution to health, health care and society. Many academic staff are personally committed to making such a contribution and do so through their community service activities. Given the difference between the level of importance placed on that value by academic and administrative staff, it may be that administrative staff have come to see the community service activities of academic staff as "personal" and peripheral rather than contributing to the overall mission of the School and University. This may lead to resentment on the part of administrative staff at academic staff not being present on campus during working hours.

Table 8:1 Summary of findings from the Faculty of Health Sciences' Values questionnaire

Value	Importance	Observance in work unit	Observance in University
Overall	• High level of importance for all values	• Value observance fairly high, but lower than importance • School of Nursing and Midwifery significantly lower level of value observance than other Schools	• Value observance only moderate (significantly less than at work unit level)
Putting students first	• Higher level of importance for School-based staff compared to staff in Centres	• Higher level of reported observance amongst administrative staff than academic staff • Higher level of observance in Schools compared to Centres	• Higher level of reported observance amongst administrative staff than academic staff
Working together cooperatively and respecting each other	• Higher level of importance for Centre-based rather than School staff	• Higher level of observance in Centres compared to Schools • Larger difference between importance and observance in Schools than Centres	
Making a contribution to health, health care and society	• Higher level of importance for academic compared to administrative staff	• Higher level of observance in Centres compared to Schools • Larger difference between importance and observance in Schools than Centres • Larger difference between importance and observance for academic than administrative staff	
Excellence in teaching, research and scholarship	• Higher level of importance for academic compared to administrative staff	• Larger difference between importance and observance for academic than administrative staff	• Larger difference between importance and observance for academic than administrative staff
Intellectual freedom and academic integrity	• Higher level of importance for academic compared to administrative staff • Higher level of importance for Centre-based rather than School staff	• Larger difference between importance and observance for academic than administrative staff	• Larger difference between importance and observance for academic than administrative staff
A safe working and learning environment		• Higher level of reported observance amongst administrative staff than academic staff • Higher level of observance in Centres compared to Schools	

Do these differences between academic and administrative staff vitiate the decision to incorporate both academic and administrative staff in the same questionnaire? As indicated, all but three of the six values were ranked as more important by academic staff compared to administrative staff. The values relating to putting students first, working together co-operatively and respecting each other and seeking a safe working and learning environment, are all ones which resonated with administrative staff. These are important values. Administrative staff have a key role in interacting with students in a range of environments, including the informal counselling associated with assignment submission and facilitating equipment and computer access.

This interaction with students is one of the ways which define university work environments as different from other work places and may be one of the factors which attracts administrative staff to work in a university. Testing the extent to which this value is adhered to is thus important. Similarly, the work of a university would grind to a halt without administrative staff, and it is important that all staff recognise the importance of the different contributions of academic and administrative staff, and value these contributions. Although a value statement needs to resonate with all staff, it is recognised that different staff will identify differentially with the different values. Despite the differences between administrative and academic staff, it is therefore appropriate to incorporate both groups of staff in studies of values.

The majority of staff in the Faculty are employed within Schools with a dual teaching and research function, relative to Centres that have a principal function of research. There were some differences between Centres and Schools in the level of importance assigned to various values, with School-based staff ranking putting students first as of more importance than Centre-based staff. Conversely, Centre-based staff ranked working together cooperatively and respecting each other and intellectual freedom and academic integrity as of higher importance than School-based staff. These differences may reflect the different roles and emphases of the different types of work units.

Value observance in the work unit

Overall value observance in the work unit of all values was fairly high, with a modal score at the 4th point of the 5 point Likert scale and the mean being between the 3rd and 4th points of the Likert scale, generally closer to the upper end of that range. This is a positive outcome, demonstrating consistency between the values espoused by

staff and those values being observed in the workplace. This suggests that the value fit for most staff is a good one, providing the basis for good work relationships, positive morale and the perception of a good working environment. However, there were differences between types of staff and based on the functions of work units. Administrative staff reported a higher level of observance of putting students first than academic staff. They also reported a higher level of observance of the value of a safe working and learning environment.

The reasons for these differences are not clear. One potential explanation could be that the Faculty Registrar at the time of the survey had continually emphasised "putting students first and service to students" in her rhetoric. For example, in discussing with Schools opening hours for the School office, emphasis would be placed on the need to meet the needs of students and that staff need to put their needs (such a convenient lunch breaks) as second to the importance of ensuring a broad range of opening hours for the School office.

Contemporaneously with the development and administration of the values questionnaire, senior Faculty administrative staff were engaged in a front line management course. This program also incorporated a project requirement that involved a survey of responsiveness of school offices to student needs (some of the results of this survey were reported in Chapter 6). This might also have signalled to administrative staff the importance that was being placed on responsiveness to students by Faculty leadership.

In terms of the difference scores, there were larger differences between importance and observance of values for academic compared to administrative staff relating to the values making a contribution to health, health care and society, excellence in teaching, research and scholarship; and intellectual freedom and academic integrity. Here these larger difference scores reflect in part the higher level of importance ascribed to these values by academic staff discussed earlier.

There were significant differences between the Schools and Centres in observance of a number of values, with staff in Schools reporting a higher level of observance of putting students first (a logical consequence of the role of the Schools versus Centres), but Centres reporting a high level of observance in terms of working together cooperatively and respecting each other and making a contribution to health, health care and society.

Although the research endeavour in Australia increasingly emphasises cooperative approaches and multi-disciplinary research (Butler 2001), these results are puzzling as teaching increasingly also involves teaching teams being responsible for units (subjects) rather than individual academic staff. In terms of the value making a contribution to health, health care and society, the work of the Research Centres is directly related to research projects that are, in the Faculty of Health Sciences, relatively applied. The principal function of Schools, on the other hand, is in the education of students and a significant proportion of staff time is devoted to that, which may be seen to be only making a very indirect contribution to health, health care and society.

Observance of values in the University as a whole

Reported value observance was lower in the wider University (that could also be interpreted as including the Faculty level) compared to observance of values at the School level. This may in part be a consequence of the method used in developing the value statements that were developed by Faculty and School leadership and as part of this development process, involved consultation at School level. There was no equivalent process at the University to develop University-wide values and so it could be argued that the way in which the value statements were developed would inevitably mean that the values would be more likely to be endorsed and observed at the School level since this level participated in the design and development of the statements.

On the other hand, many of the value statements such as those about excellence, working together cooperatively, putting students first, for example, should resonate equally across all faculties in the University. Importantly, observance at the University level of the value about making a contribution to health, health care and society, that is of all the values the most specific to the Faculty of Health Sciences, was not seen as significantly less than excellence in teaching, research and scholarship and a safe working and learning environment (both relatively generic values). Conversely, observance of the contribution value was seen as greater than working together cooperatively.

Again at the University level there was a high level of reported observance of this 'contribution' value amongst administrative compared to academic staff. There were

larger differences between the importance and observance for academic rather than administrative staff relating to the excellence value and the intellectual freedom value.

A number of questionnaires addressing the culture of universities particularly focus on issues of intellectual freedom and academic integrity (eg Taylor et al, 1998). An important finding of the Faculty values questionnaire is that this value resonates differently between academic and administrative staff, that it is perceived as more important by academic compared to administrative staff and consequently there are larger differences between the importance and the value observance scores for academic compared to administrative staff. This suggests that management action about this value needs to concentrate on academic rather than administrative staff. Future research on this value also needs to recognise these differences between academic and administrative staff.

Improving observance and value fit

The Faculty values questionnaire identified a number of areas for improvement in terms of the difference between the importance ascribed to a value and the observance of that value in the workplace, be it the local work unit or the University as a whole. Given the importance of value fit in impacting on employee morale, management action in a number of areas would seem to be appropriate.

The embedding of core values into organisations is clearly of importance. Collins and Porras (1998) identified three ways in which values were reinforced by:

- indoctrinating employees into a core ideology
- nurturing and selecting senior management based on fit with a core ideology
- aligning strategy and values (Collins and Porras 1998 p 71)

These embedding strategies involve both words and deeds, as described by Hofstede (2001). In terms of words, this would involve publicity, rhetoric, and official statements etc of the organisation. In terms of deeds, the mechanism for embedding values would include leadership behaviours, and policies and processes especially the reward processes (including performance appraisal processes) of the organisation.

A range of strategies should be used to embed the value statements in the *modus operandi* of the Faculty and thus to enhance the value fit between the organisation and

its staff. Following Hofstede, Table 8:2 outlines strategies based on words or rhetoric and deeds. Strategies based on words are an important part of creating meaning in an organisation and contributing to defining and shaping the organisation. Indeed Edelman (1988) has suggested:

> "It is language about political events, not the events in any other sense, that people experience; even developments that are close by take their meaning from the language that depicts them. So political language *is* political reality; there is no other so far as the meaning of events to actors and spectators is concerned" (pg 104).

A similar conclusion could be drawn about organisational life.

So strategies based on rhetoric should be a critical part of strategies to enhance value fit. But important as rhetoric is, the rhetoric needs to be reinforced by actions. In this thesis I cannot determine future actions or deeds, but what can be contributed is to establish or recommend frameworks or policies, that make deeds consistent with the value statements more likely. Thus the policies of the Faculty should be realigned to emphasise the values, and to highlight behaviours consistent with the values at critical points in the organisation cycle, particularly as part of the performance appraisal processes.

Many of the strategies will apply across all values, but some can be targeted to specific values.

Words

There are a number of strategies to facilitate embedding of the values that are based on words. An important first step in this regard is to ensure that the value statements are not forgotten. That is, that they are not regarded as a once-off exercise undertaken at a particular historical point in time, but rather staff are reminded of the values on a regular basis. The value statements should be put before staff in a variety of ways such as by posters regularly replaced around the buildings of the Faculty. Similarly, the value statements can be provided to staff as part of orientation to the Faculty, reinforced in orientation sessions, and incorporated in Faculty publicity material such as the annual report.

Table 8:2 Summary of proposed strategies arising from the Faculty of Health Sciences' Values questionnaire

Value	Words	Deeds/Rewards/Reinforcements
Overall	• Posters affirming values • Reinforce in staff orientation sessions and material • Incorporate in Faculty publicity material (eg. Annual Report) • Incorporate reference to values in position descriptions of all staff (listing of the values or indicating that the position works within the context of the values) • Incorporate reference to values statement in PEDS Handbook (the performance appraisal guidance for the Faculty of Health Sciences)	• Change position description of Heads of School/Centres to give specific responsibility to promote the values
Putting students first		• Change position descriptions of the Heads of School, Faculty Registrar, School Administration Managers and Head of Faculty support services to incorporate specific reference to this value
Working together cooperatively and respecting each other	• Change guidance in leadership section of Faculty PEDS Handbook to incorporate reference to need for cooperative decision-making processes in School/Centre • Change title of Administration section of PEDS Handbook to "Administration and Work Environment" • Incorporate reference to cooperative behaviour in new Administration and Work Environment section • Introduce specific monitoring of cooperative behaviour at Faculty/School level	• Change position description for Heads of School/Centres to incorporate reference to creating a work environment where staff work together and respect each other • Change the guidance to the form used for performance appraisal of staff in leadership positions to include specific reference to creating a work environment where staff work together cooperatively and respect each other • Change position description of all staff to incorporate a clause about working together cooperatively and respecting each other
Making a contribution to health, health care and society	• Incorporate reference to this value statement in the Community Service section of the PEDS Handbook	
Excellence in teaching, research and scholarship	• Incorporate reference to this value statement in the Introduction to the PEDS Handbook	
Intellectual freedom and academic integrity	• Incorporate University policy statement in Orientation material for staff • Develop Faculty policy on acceptance of industry grants	• Remind all staff annually of whistleblower policy
A safe working and learning environment	• Incorporate reference to this value in terms of reference of Faculty Occupational Health and Safety Committee	• Change position descriptions of the Heads of School, Faculty Registrar, School Administration Managers and Head of Faculty support services to incorporate specific reference to this value • Remind all staff annually of whistleblower policy

These publicity-based strategies are "soft" ways of putting the value statements before staff. Stronger strategies, more aligned to critical University decision processes, should also be undertaken. A stronger strategy is to incorporate reference to the value statements into the preamble to position descriptions for all staff. In this regard it is proposed that all position descriptions in the Faculty should incorporate the following phrasing:

> "Staff in the Faculty of Health Sciences share six core values:
> - Putting students first;
> - Working together cooperatively and respecting each other;
> - Making a contribution to health, health care and society;
> - Excellence in teaching, research and scholarship;
> - Intellectual freedom and academic integrity;
> - A safe working and learning environment.

> The occupant of this position will be expected to work in a way consistent with those values."

Reference to the value statements and their importance should also be incorporated in the performance appraisal guidance used within the Faculty (known as the Performance Enhancement and Development Scheme (PEDS) Handbook).

These language-based strategies should be reinforced through specific changes to the position descriptions of Heads of School to give them clear responsibility to promote the values of the Faculty. Strategies such as these would highlight the importance of the values across all staff in the Faculty, and in particular those with leadership responsibilities.

Specific strategies might also be required to reinforce specific values. By incorporating reference to the values, and indeed to specific values, it is hoped that Heads of School (and others for whom position description changes are made) will devote increased attention to value adherence. This increased attention is more likely to occur if it is reinforced through reference to it in the performance appraisal interview with supervisors.

With respect to the value of putting students first, the position description of Heads of School, the Faculty Registrar, School Administration Managers and the Head of Faculty support services should be changed to incorporate a specific reference to this value. In particular it is proposed to add a clause as follows:

> "The Head of School has a key responsibility to promote adherence to the Faculty value of putting students first."

The value working together cooperatively and respecting each other was the one where there was the highest level of endorsement across all values in the Faculty, but also one where there was a significant difference between the value and its observance. A range of strategies is therefore proposed to reinforce the importance of this value. These strategies are based on words and enhancing the likelihood of changes in deeds. The rhetorical strategies should go beyond affirming the importance of this value, but also specify some implications if this value were to be adhered to in the way in which a work unit operates. An organisation that values working together cooperatively should exhibit this through cooperative decision-making processes, and this is one way in which this value might be seen to operate. Accordingly there should be changes to the guidance in the leadership section in the Faculty PEDS Handbook to incorporate reference to the need for cooperative decision-making processes in Schools/Centres.

A further rhetorical policy would be to rename the "administration" section of the PEDS Handbook as the "Administration and Work Environment Section". This change should be supplemented by reference to the role of all staff in ensuring cooperative behaviour in achievement of the work unit's goals.

Finally, evidence that the leadership of the Faculty places an emphasis on this value should, through modelling, lead Heads of School and others in leadership positions to place an emphasis on the value. One way of indicating such an emphasis would be to introduce regular monitoring of the work environment, and specifically cooperative behaviour. As was identified in Chapter 1, a number of university-specific questionnaires have been developed and validated, including the University Level Environment Questionnaire (Dorman, 2000) and for the Academic Work Environment Study (Winter et al, 2000). A questionnaire such as these should be administered every two to three years.

Deeds

A critical strategy in terms of deeds across all values will be to reinforce the values as part of position descriptions and as part of the performance appraisal process. This should highlight value adherence as part of the regular cycles of the Faculty.

Reinforcing the rhetoric with regard to the value working together cooperatively and respecting each other could occur through change in the position description for Heads of School/Centre to incorporate reference to creating a work environment where staff work together and respect each other. The specific proposed wording could be:

> "In line with the Faculty values, the Head of School should aim to create a working environment where staff work together cooperatively and respect each other."

This change of wording in the position description would need to be accompanied by change in the guidance to the form used for performance appraisal of staff in leadership positions to include specific reference to implementation of this value within the work environment of the School/Centre. The proposed wording in this area is as follows:

> "A key component of the management function of a leader within the Faculty is the creation of a work environment where staff work together cooperatively and respect each other."

The position description for Heads of School with the possible revisions highlighted is incorporated as Appendix 4 in this thesis.

But the responsibility for working together cooperatively does not fall only on Heads of School/Centre. This is an aspiration and an obligation for all staff within the Faculty. A common clause should be added to all position descriptions to emphasise this value, possibly with the following phrasing for one of the position's duties:

> "To contribute to the working environment of the School/Centre by participating in decision-making and working cooperatively with colleagues and respecting their contributions."

In terms of the value making a contribution to health, health care and society, a reference to this value should be incorporated in the community services section of the PEDS Handbook, thus strengthening the legitimacy accorded to community service activities.

As with the previous value statement, only rhetorical strategies will be used in emphasising the value about excellence. The PEDS Handbook is designed to highlight characteristics of performance that are seen as satisfactory, very satisfactory or outstanding. The emphasis on excellence reflected in this value statement sits easily in that framework. To reinforce this value a statement should be added to the introduction section of the PEDS Handbook along the following lines:

> "The PEDS process is conducted within the framework of the Faculty of Health Sciences' policies and procedures, including the Faculty's values statement. Amongst other things, the Faculty values statement affirms that staff of the Faculty value excellence in teaching, research and scholarship, and the PEDS process gives recognition to that.

The value intellectual freedom and academic integrity is often cited in value surveys of academic staff (Taylor et al, 1998) and this is an issue that will be referred to later in this chapter. As with many other universities, this value is one that has often been challenged by the changing shape and nature of the university.

The University's code of conduct indicates clearly that "the University is committed to the principle that academic freedom is essential to a proper conduct of teaching, research and scholarship". The code of conduct goes on to say:

> "Staff are encouraged to exercise their rights to intellectual freedom through contributions to public debate and discussion on matters relevant to their areas of specialist knowledge and expertise. There is an obligation to use this right in a manner, which is consistent with an honest and informed search for and dissemination of knowledge and truth. Where informed comments are offered by staff it is expected that commentaries will lie within the areas of expertise of the commentators. The University places no constraint on the right of University staff freely to express opinions in their private capacities as members of society.
>
> In making written or oral comments which purport to represent, or might reasonably be interpreted to represent, the views of the University, staff should ensure that they have proper authority granted by a person holding actual authority on behalf of the University."

The La Trobe University policy statement in this area is carefully crafted to articulate the University's interest.

The code of conduct thus constrains staff only to comment publicly within their area of expertise. In a sense this section of the code of conduct could be interpreted to limit staff ability to comment on the functioning of the University. Notwithstanding that limitation, the general tenor of the code of conduct, and in particular the introductory statement, is one that affirms academic freedom. Making staff aware of that commitment may assist to increase the perceived value observance of the value about intellectual freedom and academic integrity within the University.

A specific area where intellectual freedom and academic integrity may be challenged relates to the increasing importance of industry-funded research of universities, and the Faculty of Health Sciences is no exception in that respect. Industry funded research may include contractual clauses that limit disclosure of information, including rights for publication. In this regard, such contracts may be seen to impinge on intellectual freedom. Similarly, academic staff that are reliant on industry-funded research may either inadvertently or purposefully distort their findings to be more acceptable to the industry funders. This may be overt by the slant placed on the research findings, or it may involve suppression of unwelcome results. Challenges to academic integrity of this kind are well recognised within the health sciences (Neumann et al, 2000; Lexchin et al, 2003; Friedberg et al, 1999).

One strategy to reinforce the importance of the value about intellectual freedom and academic integrity would be to develop a Faculty policy on acceptance of industry grants, addressing contentious issues such as the right to publication etc. In addition to a policy statement or guidance about industry grants, steps should be taken to ensure staff are aware of their right to highlight to senior management situations where they felt their intellectual freedom or academic integrity was compromised. Staff should be reminded annually of the whistleblower policy of the University and that this policy can be used where it is felt that the values of the Faculty are being impinged through management or other action.

In terms of the value a safe working and learning environment, the University and the Faculty already have processes about occupational health and safety. These can be reinforced by referring to this value statement in the terms of reference of the Faculty Occupational Health and Safety Committee. Specifically a statement should be included in the terms of reference of the Committee, such as the following:

> "The Faculty Occupational Health and Safety Committee works within the policy and procedures of the University and the Faculty, including the Faculty's values statement. Staff of the Faculty value a safe working and learning environment and accordingly the role of the Occupational Health and Safety Committee is an important one in the Faculty."

Reinforcement of this value should occur through change in the position descriptions of senior staff of the Faculty to incorporate specific reference to this value, again drawing to the attention of staff their right to blow the whistle on situations where they think occupational health and safety is being impinged.

The mix of strategies

The strategies articulated here are thus a mix of strategies emphasising rhetoric and bringing before staff, Heads of School and other senior decision-makers the value statements in general, and specific value statements in particular circumstances. These rhetorical strategies should be reinforced through the performance appraisal process, the main mechanism for reinforcing behaviours and providing guidance to staff and leaders within the organisation.

There should also be regular monitoring of the value statements, particularly relating to the value about working together cooperatively and respecting each other. The values questionnaire itself should also be repeated on a regular basis, possibly every two to three years.

Values by their nature do not change very much, but the observance of them could change over a two-year period. The questionnaire was last administered at the end of 2003/beginning of 2004 and it is therefore proposed that a similar questionnaire be administered at the start of 2006. The repeat questionnaire should be structured in a similar way to the original questionnaire to allow comparison between the results over time. Because different groups within the organisation place difference importance on the values, the questions about the importance of the values to the staff members personally should continue to be asked.

The questions about length of time that people had worked in the organisation and the precise level at which they are working yielded relatively little information in terms of identifying differences between respondents (in part because the total number of respondents meant that there was not sufficient power to use those variables in combination with other variables of interest). Given the possibility that those variables could be used to identify staff, it is proposed that, in any repeat of the questionnaire, staff not be asked the question about length of time in the organisation and that a broad grouping to administrative versus academic staff be used to identify staff rather than asking questions about specific levels of appointment.

Conclusion

This chapter has emphasised the management implications of the findings of the values questionnaire. It demonstrates that the aims articulated in chapter 1 have been achieved. The questionnaire has yielded useful information for management purposes, in a way which does not breach the confidentiality undertakings involved in the data collection or misuse the trust shown by staff in their frank responses to a survey primarily designed and developed by a person in authority. In my view researchers have an ethical obligation to research respondents to act on results (where they are of policy and statistical significance) to repay respondents for their time and thought and the findings provide important lessons for the way in which the Faculty of Health Sciences at La Trobe University is managed. The questionnaire was able to identify a particular School which required closer management attention.

This report about the School of Nursing and Midwifery and the actions taken highlight ways in which climate surveys can be used for management purposes. There are both strengths and weaknesses of such uses. On the one hand, there was clearly a malaise in the School which needed to be addressed. The survey results provided the stimulus from management action.

On the other hand, the leadership changes I stimulated might be seen as a direct consequence of the questionnaire results. However, it is unclear whether or not I would have initiated leadership change in the School without the questionnaire. This "counterfactual" is untestable. Certainly I had received informal feedback about problems in the School before the questionnaire was distributed. Indeed it was always in the back of my mind that the questionnaire would identify problem Schools (Aim 5).

Identifying culture or value issues and *addressing* them are two different things. Culture and values can be embedded in organisations and effecting change to culture and values can be extremely difficult. But, as argued in the introduction, a critical role of leaders in organisations is shaping the culture of the organisation and my role as Dean is important in this regard. The values questionnaire can therefore be used to inform how I prioritise my time; the phrasing of position descriptions in the Faculty; and the emphasis I place on values and culture issues in my discussions with Heads of School as part of the performance appraisal process.

But it is also important to note that the difference between the importance of a value and its observance is greater at the University rather than the School level. This has important lessons for the University as a whole, the ramifications of which also go to leadership and the *modus operandi* of the University. In line with the University of Bath's requirements for the Doctor of Business Administration degree in Higher Education Management, an Annex is provided to this thesis, in the form of a 'management briefing report', which makes recommendations arising from this thesis. That briefing note (Appendix 6) draws heavily on this Chapter but also includes a recommendation that a study, similar to the one reported in this thesis, be conducted across the whole of La Trobe University.

Chapter 9: Conclusion 2 - Broader Implications

In this second conclusion chapter I draw out the wider ramifications of this study, in terms of replication and for other researchers interested in the study of values in universities.

This study of values is situated in a particular context: the Faculty of Health Sciences at La Trobe University. The results reported in this thesis are a cross-sectional representation of the values held by staff in a Faculty with a particular origin (described in chapter 3) and in a 1960s Australian university. The study was designed to contribute to the management processes of the Faculty but the findings are not entirely context-dependent and the study has implications beyond the Faculty and provides lessons and raises issues that are relevant to the study of higher education generally. These implications will be discussed specifically with respect to the value working together cooperatively and respecting each other, and the value intellectual freedom and academic integrity.

A common theme through the literature referred to in Chapter 1 has been the growth of managerialism in universities and/or entrepreneurial universities generally.

Managerialism is seen by many academics to be an undesirable trait, characterised by centralisation of decisions, subordination of "academic values" to the pursuit of new markets, and the decline in standards in universities. Managerial cultures in universities are seen to be antithetical to the collegial ethos of universities. A number of Australian studies have highlighted the concern that many academics have with these issues (Taylor et al, 1998; Dorman 2000; Marginson and Considine, 2000).

Managerialism in universities is often accompanied by a change in the language and rhetoric of universities with the rhetoric of "students as consumers" increasingly used. Although there are significant risks to this conceptualisation of the relationship between a teacher and a student (Browne et al 1995), the consumer metaphor has some logic. In Australia, for example, an increasing number of students are paying full costs of their university education, both at undergraduate and postgraduate level. Even for students in subsidised places (that still represent the majority of Australian students), the proportion of the cost of education that is being met by students is increasing following recent changes to higher education policy in Australia (Duckett, 2004). In the case of business and law students, for example, even students in receipt of Commonwealth funded places will pay around 80% of the costs of their education.

Students themselves are aware of their contribution to the costs of their own education, despite the fact that these costs can be deferred through income contingent loan arrangements from the Commonwealth Government. Students are increasingly exercising their "rights" as consumers using that discourse, seeking legal redress for courses that are not seen as being up to date and exercising their legal rights in terms of university decision-making. They are increasingly vocal about expecting high quality courses, programs and teaching.

The medieval concept of universities as a learning community, where there was a continuum from student to journeyman to master, is not now a concept that is recognisable in Australian universities, except perhaps at the doctoral level. For undergraduate students, massification of universities has transformed the intimate relationship between student and lecturer in a tutorial situation to a multipartite relationship in a large anonymous lecture theatre.

Although under challenge, the rhetoric of student as partner may be able to be reclaimed as universities place an emphasis on learning as well as teaching. There are also remnants of the old rhetoric of universities as a collegial institutions, and many universities still refer to a "university community" in their discourse, although this may simply reflect a veneer behind which the managerial university functions.

In this study of values staff put a high emphasis on working together cooperatively and respecting each other. In many cases staff observed this value in the local work environment. At the School level many subjects are now taught by teaching teams. Similarly, coherent programs of study require close working between teachers of latter year subjects and those responsible for the prerequisites. Staff need to be prepared to compromise on day to day matters such as conference leave, child care arrangements, and so on, to ensure the teaching tasks can be completed. They also need to compromise on approaches to teaching, including the order in which concepts are introduced, especially over separate subjects, and what is reasonable in terms of the amount of material to be covered in different subjects. Larger decisions about overall teaching styles (eg the adoption of problem-based learning) also need to be made in a collegial environment. It is thus easy to understand why working together cooperatively is seen as important, and the second component of that value, respecting the views of others, is also valued.

Academic and administrative staff need to work together in universities, and it was interesting to note that there was no statistically significant difference between the views of academic and administrative staff on the observance of this value.

Collegial decision-making may be easier in the more homogenous and tightly defined environment of a School or Research Centre. There is greater coherence of goals at the School as staff are united around a common discipline or profession base. A number of studies have found differences in approaches to teaching, concepts of quality and different emphases on values in different disciplines (Lueddeke, 2003; Kekäle, 2000, 2002; Newman, 2001).

Greater homogeneity of goals makes collegiality in decision-making somewhat easier: it is easier to reach agreement about directions when staff share a common basis, and it would also be easier to reach agreement about methods and priorities in this environment. In smaller and more tightly defined organisational units, the benefits of decisions and the costs will fall more directly on the unit itself, thus minimising opportunities for distrust and discord.

The situation is reversed at the university level. The larger the organisation, the more heterogenous the goals, discipline bases and attitudes of staff and work units. More than 40 years ago, C.P. Snow identified that the values, methods and approaches of staff in the sciences and the humanities were so different that he coined the term "the two cultures" to reflect the differences (Snow, 1964). In fact, there are now more than two cultures in universities: the increasing number of professional programs taught in universities adds a third culture that is as different from the laboratory sciences as laboratory sciences are from the humanities. This disciplinary or cultural heterogeneity may lead to reduced identification with the wider university, alienation from its mission and a perception that the staff member's values are not shared by university management and thus not reflected or observed in the wider university environment.

In the past the time scale of universities' decisions was slow and there were few costs to universities of dilatory decision-making. In the new entrepreneurial university, business opportunities need to be seized lest the competitor within the same city, country or indeed an international competitor snaps up the opportunity. The recent Lambert Report in the United Kingdom reported that

> Business told the Review that universities could be more dynamic in their approach to collaboration. The perception is of a sector that

> can be slow-moving, bureaucratic and risk-averse. (Lambert Report 2003, p93)

The desired dynamism comes at a cost: the new decision-making culture to respond to the passing opportunity precludes debate at School, Faculty and University level conducted sequentially over periods of months. Lambert cites this trend approvingly:

> Many universities are developing strong executive structures to replace management by committee. With well-defined lines of responsibility, clearly delegated authority and cohesive management teams of academics and administrators, this approach allows for dynamic management in an environment where decisions cannot wait for the next committee meeting. (Lambert Report 2003, p93)

Lambert goes on to assert that

> This (decision making style) need not be at the expense of collegiality. A culture of consensus is not only achievable, but is a priority for many vice-chancellors running executively-managed institutions. (Lambert Report 2003, p93)

Lambert's prescription has not gone unchallenged (Shattock 2004, Buckland 2004) and it is not immediately obvious that it is possible to reconcile a 'culture of consensus' with an 'executively managed institution', even assuming the latter is a desirable goal. The staffing profile of universities is ageing (Anderson et al, 2002) and many staff reminisce about the golden era before the advent of entrepreneurialism. But railing against these changes will be as effective as King Canute with the tides.

What is shown in this study of values at La Trobe University is that, perhaps because of these changes and challenges, staff value collegiality highly. They value working together cooperatively and respecting each other. Universities need to recognise that in their management processes (Lapworth 2004, Middlehurst 2004). As discussed above, because of their greater homogeneity this may be easier to achieve at the School level. At wider levels the challenge should be confronted, with the response being to provide more opportunities for consultation with staff about key strategic directions. Strategy, by definition, is relatively unchanged from year to year and so the slow decision-making processes of universities should not impinge on the opportunities for staff to be engaged in developing strategic plans and setting priorities for their implementation. Of course the very concept of a strategic plan is managerialist, but staff are probably resigned to accepting this incursion of modernity.

Strategy development in higher education thus needs to be consultative. Universities need to adopt the characteristics of "learning organisations" (Dill, 1999) that incorporate sharing of knowledge and collective problem solving within an organisation. Strategy development also needs to be consultative because of the characteristics of universities (Newton, 2003) and the unique situation where both staff and students are relatively autonomous (Easterby-Smith, 1987). As Easterby-Smith points out, this situation requires:

> "....much more emphasis on the contribution of those lower down the organisation than it does on the grand strategies of those at the top. Both the quality of the service and the impetus for change and innovation depends on the performance of those directly involved in delivery. This implies that the responsibility of those at the top must be to create an environment in which those lower down are able to develop their skill and competence to the full. In some ways it is similar to the best features of "old style" universities; the main difference is in the strong commitment to the development of all the people involved."

Strategic planning in universities thus needs to be a cooperative endeavour that reflects these sorts of values. A higher education manager, therefore, needs to have developed skills in consultation strategies with staff, that will act to bring staff together across the disparate cultures of the university so that they feel like they are indeed working together cooperatively (Yielder and Codling 2004).

To the extent possible, other decision-making processes also need to involve wide consultation and to allow staff to feel that they are able to influence the broader work environment within which they are situated. Leadership skills of higher education managers need to be developed accordingly.

As Gibbs et al (2000) has pointed out, this creates a:

> ".... need for the leadership to communicate widely and continually and in straightforward language. ..... Communication is not a unidirectional matter. Change will bring difficult issues to the surface: the leader has to be prepared to listen to the concerns of staff, and to show that they have been taken into account as the strategy is developed" (pages 368-369).

All of this will place further challenges on the leadership skills of managers, with leaders in higher education needing to embrace the need to shape culture through a consultative process working at all levels of the university (Knight and Trowler, 2001). These new challenges may already have led to changes in the characteristics of Deans and Heads of Departments in universities (Harman, 2002) that may distance

these leaders from the staff within their purview. Strategies to ensure empathy and understanding with their colleagues will thus be necessary to ensure commitment to the goals and strategies that are being articulated and developed.

In addition to the collegiality value, staff in the Faculty of Health Sciences put a high value on intellectual freedom and academic integrity. This is also a value that has been seen to be under threat in Australian universities in the last 50 years. Especially during the Vietnam War, academic staff spoke out against universities participating in research associated with a war with which they disagreed (Ladd 1997, Heineman 2001). Challenges to intellectual freedom in the 21st century are subtler. Although universities still seek to attract contractual research, the companies involved are not able to be so simplistically characterised as evil as Dow Chemicals with its links to napalm (Hersh 1968). The new threats to intellectual freedom come from limitations on the right to publish findings, and from fears that criticism of company policies may lead to withdrawal of contracts. In a situation where universities might be dependent on government contracts for teaching arrangements (such as in the health sciences in the United Kingdom, and in some cases in Australia), criticism of government may also impact adversely on the university interest.

A traditional role of universities has been as a critic of society and of dominant beliefs. In the Middle Ages this criticism could lead to severe punishments by the church and intellectual freedom of universities was thus highly valued by staff and students. Although the punishments for unpopular critics are not so severe in the 21st century, they can impact on the livelihood of academic and administrative staff either directly or indirectly. Universities have thus developed codes of conduct to constrain public discourse.

In the case of La Trobe University the constraint has been about the rights of academic staff to discuss publicly the affairs of the University rather than the affairs of their discipline. However such distinctions are not always clear, for example in the case of research contracts that are being entered into which may limit publication rights but yield significant financial benefits to the university.

Again, this new challenge to intellectual freedom requires university leadership to tread a careful path between these competing tensions. As shown in this study, staff place a high value on intellectual freedom. Interestingly, no difference was found in the commitment to this value between senior staff (Professors and Associate Professors)

compared to other academic staff. Observance of this value at La Trobe was seen as reasonably high, ranking higher than putting students first and working together cooperatively and respecting each other. Although not all values could be rated equally and there are disadvantages in the lower ranking of the other two values, the higher ranking for intellectual freedom augers well for the environment that has been created at the University.

Conclusion

As argued in Chapter 1, the values of the organisation are an important component of the work environment of staff within the organisation. Clear articulation of the values of the organisation and monitoring of their observance can be beneficial for the organisation. As Collins and Porras (1998) have shown, high performing companies are characterised by clear articulation and steadfast maintenance of values over time. Universities are enduring organisations, as are the values reported by staff in this study. In most cases these values would resonate with staff of fifty years ago in the pre-massification era of universities.

This study has shown that there is a high level of homogeneity across academic and administrative staff in different work settings about the importance of a set of values to themselves personally. It has also shown that it is possible to measure the observance of these values in the workplace and in the wider university. However, the dissonance between the importance and the observance raises issues for management at School and University level. Proposals to address these issues have been articulated earlier in this chapter. The study also raises wider issues for universities and their management.

Although not intractable, addressing these issues requires new skills for university leaders that will require them to balance their apparent enthusiasm for the "entrepreneurial" university and managerialism generally, with the more traditional and enduring values still held dear by their staff.

Thus in addition to the implications for the Faculty of Health Sciences identified in chapter 8 and the wider ramifications in chapter 9, this research should inform my own *modus operandi.* As a manager in a research-intensive institution, I should ensure that research informs my practice and, where possible, lessons from my practice are so

structured that they can contribute to the development of higher education management more broadly.

More personally, the research which underpins this thesis provides an example of the benefit of adopting a systematic and rigorous approach to addressing a component of the role of a university manager. Obviously, not every management problem can be addressed with this level of rigour, nor with an eye to the wider ramifications of an intra-university study. This thesis has reinforced to me the imperative of applying the same level of statistical rigour in my management work as applies in research. Too often university staff surveys present descriptive results without testing statistically for interaction and differences.

The thesis builds on and contributes to a research literature. Again, there is a lesson here for me: others have often struggled with the same management problems as I do and searching for and reading their approaches and answers will assist in helping me in my day-to-day work.

Appendices

Appendix 1: Faculty of Health Sciences Values Questionnaire

LA TROBE UNIVERSITY

FACULTY OF HEALTH SCIENCES

ESPOUSED AND OBSERVED VALUES

An important part of any strategic planning or management process is developing a value statement and assessing the extent to which those values are enacted.

A value statement for the Faculty of Health Sciences has been developed after consultation with Schools. In this survey we are asking staff to identify how important each of these values is to you and also to identify whether these values are adhered to in the School and the University.

The survey asks two different types of questions. The first assesses how important the value statement is to you personally. The second set of questions asks you to assess the way in which the values are adhered to in your School. There is also an open-ended question about inhibiting factors.

Please take the time to fill in this questionnaire and return it either electronically or in hard copy to ..... in the Faculty Office by ..... All results will be treated anonymously.

C.J. Handley
Acting Dean
20 November 2003

ESPOUSED AND OBSERVED VALUES QUESTIONNAIRE

Could you please indicate your School/Centre/Unit:.....

Could you please indicate (by circling) whether you are: a) Academic – level A/B, C or D/E b) General – HEO level 4, 5, 6 or 7+

How long have you been employed at La Trobe University or its predecessors? (circle one) Less than 2 years, 2-5 years, 6- 10 years, more than 10 years

Please rank all the statements on a scale of 1-5 according to how important each is to you personally. One is less important and 5 is very important.

Staff in the Faculty of Health Sciences value:	**How important is this value to you personally?** 1 = Not at all important *5= Extremely important*	**To what extent can you observe this value in your School/Centre/Unit?** 1 = To a very small extent *5 = To a very great extent*	**To what extent can you observe this value in the University as a whole** 1 = To a very small extent *5 = To a very great extent*	**What are the main factors that might inhibit adherence to this value in your School/Centre/Unit**
Putting students first.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	
Working together co-operatively and respecting each other.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	
Making a contribution to health, health care and society.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	
Excellence in teaching, research and scholarship.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	
Intellectual freedom and academic integrity.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	
A safe working and learning environment	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	

General Comment

Please make any general comments on the values.

Thank you for taking the time to complete this questionnaire.

Appendix 2: Classificatory data on respondents to Faculty values questionnaire

Table A2.1 Response rate to Faculty values questionnaire

School	Academic Staff						General Staff						Total Response Rate
	Number	Responded 1st round	Responded 2nd round	Responded 3rd round	Total	%	Number	Responded 1st round	Responded 2nd round	Responded 3rd round	Total	%	%
HBS	39	8	6		14	35.9%	13	7	1		8	61.5%	**42.3%**
ISU							9	3	1		4	44.4%	**44.4%**
HCS	21	3	2	2	7	33.3%	13	1	2		3	23.1%	**29.4%**
S/W & S/P	20	2	5		7	35.0%	7	2	0		2	42.9%	**33.3%**
Orthoptics	6	1	2		3	50.0%	1	1			1	100.0%	**67.1%**
OT	27	1	3	4	8	29.6%	6	1	1	1	3	50.0%	**33.3%**
Bouverie	0	0			0		20	1		1	2	10.0%	**10.0%**
Faculty Office	4	2	0		2	50.0%	11	4	3	1	8	63.6%	**66.7%**
AIPC	19	2	2	1	5	26.3%	6	1	1		2	33.3%	**28.0%**
Public Health	62	9	10	1	20	32.3%	21	2	3	3	8	38.1%	**33.7%**
CSMCH	13	3	5		8	61.5%	2	0			0	0.0%	**53.3%**
Physiotherapy	24	4	4		8	33.3%	7	2		0	2	42.9%	**32.3%**
Nursing	45	11	6		17	37.8%	26	3	5		8	34.6%	**35.2%**
ARCSHS	11	0	1	4	5	45.5%	5	0	1		1	20.0%	**37.5%**
TOTAL	**297**	**46**	**46**	**12**	**106***	**36.4%**	**147**	**28**	**18**	**6***	**54***	**36.7%**	**38.6%**

* Includes 2 academic and 2 administrative respondents who did not indicate School. A further 9 respondents did not indicate either School or type of employment

Table 0:1

Table A2.2 Respondents' length of time employed by staff classification

	< 2 years	**2-5 years**	**6-10 years**	**> 10 years**	**Total**
Academic	***18***	***24***	***18***	***38***	**98**
Admin/Tech	***14***	***25***	***8***	***4***	**51**
Total	**32**	**49**	**26**	**42**	**149**

Table A2.3 Respondents' length of time employed by principal function of work unit

	< 2 years	2-5 years	6-10 years	> 10 years	*Total*
School	26	36	16	36	*114*
Research Centre	3	6	8	3	*20*
Faculty central	2	7	2	3	*14*
Total	**31**	**49**	**26**	**42**	**148**

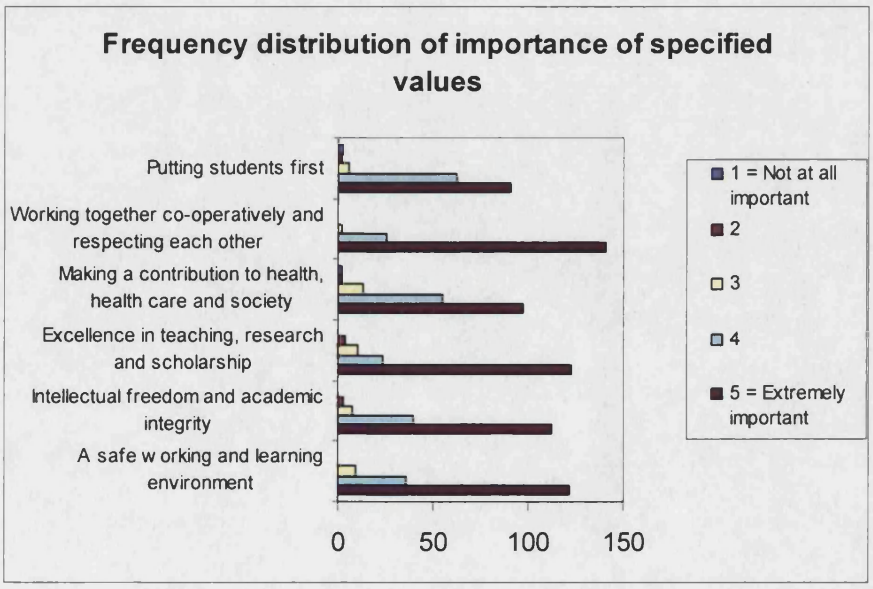
Appendix 3: Reports To Staff

A full report on the values questionnaire was provided to the Faculty leadership group (Faculty Development Committee) over the period August-October 2004. The content of these reports was similar to the content of the chapters in this report. In some cases Heads of School/Centre discussed the reports with staff in staff meetings. A summary of each of the reports was also distributed electronically to all staff in the Faculty to provide them with feedback on the results of the values questionnaire. This appendix reproduces those reports as they were distributed to staff.

Report 1: Importance of values

You may recall that in 2003 a questionnaire was distributed to staff seeking staff views on the values that had been developed by a consultative process over the period 2003, and whether those values were observed in reality. Overall 169 responses were received to the questionnaires, representing a 38% response rate. In this email I report back to staff on the first aspect of that questionnaire, namely the espoused values of staff.

The figure below shows the frequency distribution for the six values that we had identified as possible Faculty values. More than half the staff identified each of those values as being extremely important to them. It therefore seems to me that these values do resonate with staff in the Faculty and the six values ought to be incorporated as the official Faculty Values Statement.



There were some differences between various groups of staff. For example, academic and administrative/technical staff had somewhat different emphases in their values, with academic staff rating "Making a contribution to health, health care and society"; "Excellence in teaching, research and scholarship"; and "Intellectual freedom and academic integrity" as being of more importance to them than did administrative and technical staff. To some extent this difference reflects the different nature of the roles of academic versus administrative and technical staff where, for example, academic staff have as part of their role to provide community service, in a sense to make a contribution to health, health care and society.

There were also differences between staff in Schools and in Research Centres, with staff in Research Centres placing less of an emphasis on "putting students first". Again, this could be expected given the very different roles of Schools and Research Centres. There are also differences between Schools and Research Centres in terms of working together co-operatively and respecting each other, a result which on face value is somewhat surprising. Research Centres also placed a higher value on intellectual freedom and academic integrity, which may to some extent reflect the greater challenges faced by Research Centres in terms of working in an environment where there is a significant proportion of contract-funded research.

I would again like to thank those staff who responded to the questionnaires because I think they will provide an important basis for future planning in the Faculty.

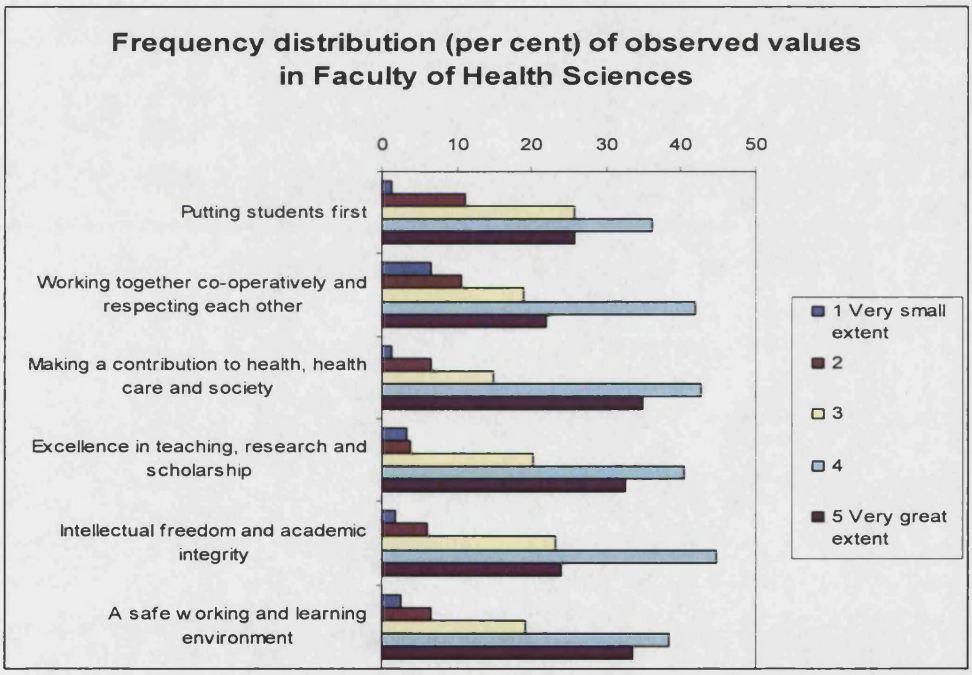
If any staff wish to discuss these matters with me, please feel free to contact me directly.

S.J. Duckett
Dean

Report 2: Observed values in the work unit

This report follows up the previous report on the staff values questionnaire which was completed in late 2003 and early 2004. It reports on the extent to which the espoused values were actually observed in practice. The results are mixed.

Overall, the mean scores for most of the value statements were between 3.5 and 4 on the 5 point Likert scale (with point 5 meaning that the value was observed to a very great extent). Unlike the previous question about espoused values, where the modal response was 5 on each of the values, the modal response for all of the value statements was at the 4th point of the Likert scale, suggesting that we have room to improve in this area, but that overall there is a fairly high level of observance of these values in practice (see figure for the distribution).



There were important differences between work units in the Faculty. In particular, there were significant differences between the ways in which some of the values played out between Schools and Research Centres. Some of these were to be expected. For example, there was a lower value placed on putting students first in Research Centres relative to Schools. Research Centres put a higher value on making a contribution to health, health care and society and on working together co-operative. It is not immediately clear why this should be so, especially in the case of the latter value.

There were some significant differences between Schools on the observed values. Although some Schools were significantly above the mean of all other Schools for some of the values, this may be a reporting artefact. On the other hand, the School of Nursing and Midwifery had lower scores on most of the value statements relative to all other Schools, and this is something that I am taking up with the staff of that School.

In terms of barriers to adherence to these values, a cluster of responses relating to funding, resources, workload and time constraints were overwhelmingly the most commonly reported constraints in terms of achieving most of the values. Clearly staff are frustrated by the effect of resource constraints on their work, but we do need to reflect on whether funding and resource constraints truly impact on putting students first, which is a value expressed as a relative priority rather than an absolute achievement.

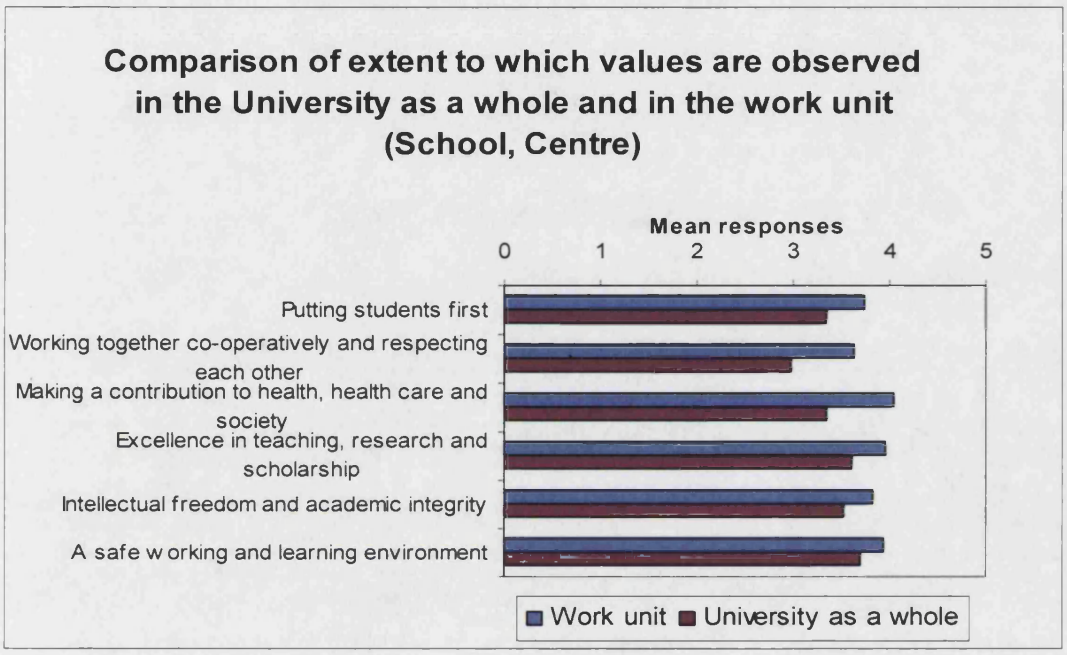
A more detailed report on this and the earlier analysis of the espoused value statements is available from me. I would also be happy to discuss any aspects of this report with staff.

S.J. Duckett

August 2004

Report 3: Observed values in the University

I am writing to staff to provide further information arising from the values questionnaire. A third question in the values questionnaire asked about the extent to which the value statements were observed in the University as a whole. The results of the mean responses to each of the value statements, compared to mean responses to reported adherence to the values in the work unit are shown in the figure.



What is important here is that the results for the University as a whole are somewhat disappointing. We see that the extent to which values are observed in the University as a whole are somewhat lower than the extent of observance in the work unit.

There were no statistically significant differences between Schools or by length of employment in the University, although academic staff did report a lower level of value observance for the value putting students first, compared with administrative and technical staff. This might be because academic staff are more aware of the University's commitment in this area.

I would like to thank staff again for completing the questionnaire, which I think has provided useful information for the Faculty.

S.J. Duckett

August 2004

Appendix 4: Duties and Responsibilities of Heads of School

(Additions to embed values statements in italics)

Background:

The accountabilities of the Head of School are described in Regulation 11.4, The Schools, Special Status Departments and Heads of School.

The Head of School is appointed following a call from the Dean for expressions of interest from staff at Level D and above. The Dean initiates a consultation process with all members of the School regarding the nominees. The Dean then makes a recommendation to the Vice-Chancellor and Council.

Primary Objectives:

The Head of School is responsible for the academic leadership and operational management of the School. The Head of School is one of the most critical roles in the University. The Head provides leadership to staff in teaching and course design, research and professional activities. The Head of School works closely with the professors of the School and the Dean in all areas.

Staff in the Faculty of Health Sciences share six core values:

- *Putting students first;*
- *Working together cooperatively and respecting each other;*
- *Making a contribution to health, health care and society;*
- *Excellence in teaching, research and scholarship;*
- *Intellectual freedom and academic integrity;*
- *A safe working and learning environment.*

The Head of School will be expected to promote those values in the School and work in a way consistent with the values.

DUTIES AND RESPONSIBILITIES

The Head of School must:

1. Provide academic leadership, sometimes in a multi-disciplinary context and across multiple locations. The Head of School is responsible for the School's strategic planning and for the quality of the School's teaching and research programs.

2. Ensure that the School has a range of student-centred strategies and services in place including consultative processes with students. *The Head of School has a key responsibility to promote adherence to the Faculty value of putting students first.* The Head of School has particular responsibilities in the timely resolution of student grievances and in ensuring adherence to University and Faculty policy and procedures.

3 Lead and manage the staff of the School. Manage all personnel matters including recruitment, induction, appraisal, promotion, reclassification, professional development, advice on discipline and grievance resolution. The Head of School must be fully aware of all Enterprise Bargaining Agreement terms and conditions and operate within this institutional framework. The Head of School must ensure that, *consistent with the Faculty value statement of valuing 'a safe working and learning environment' that* there is a safe and productive work environment within the School and that the University's principles of equity and fairness are applied.

4 Provide responsible management of the School's finances ensuring compliance with all university and faculty policies and procedures. Ensure that the School has a range of initiatives in place to raise non-Commonwealth revenue such as consultancies, fee-paying programs etc.

5 Ensure that there are effective and consultative governance structures in place in the School. Ensure that all academic and research

administration policies and procedures are managed efficiently and are aligned with University and Faculty requirements. *In line with the Faculty values, the Head of School should aim to create a working environment where staff work together co-operatively and respect each other.*

6 Build and maintain relationships and partnerships with key industry, professional associations and government agencies that are relevant to the discipline mix within the School.

7 Contribute to university and faculty decision-making processes and policy development through participating co-operatively on key committees and the contribution of ideas and creative solutions.

8 In Schools which provide clinical services, the Head of School must ensure safe and effective provision of care, which legal requirements for clinical practice are met, quality management processes are effective and that service demonstrates a high quality service model to students.

S.J.Duckett
Dean

Appendix 5: Account of Personal Development over the Course of the DBA Program

The welcome from John Taylor, as Director of Studies, at the first residential period for the Doctorate of Business Administration in Higher Education Management read:

> "The DBA ..... aims to provide a core of awareness, knowledge and skills which enable participants to engage creatively in the serious study and analysis of issues in higher education at all levels, leading to the emergence of original thinking, new solutions and understandings, and alternative ways of working which will be helpful to all concerned. ..... It aims to encourage and facilitate both reflective self-reflection and the sharing of ideas and experience among participants."

A reflective and self-evaluative practitioner is one of the best ways of ensuring quality improvement over time (Schön 1983; Brockbank and McGill 1998; Ramsden 2003). Professional practice increasingly encourages self-reflection as part of professional development and to facilitate continued professional growth. The DBA in Higher Education Management structures that reflection formally into the program by requiring candidates to provide "a critical account of their personal development over the DBA program".

The DBA program can be conceptualised as having four components:

- The formal academic presentations in the residential schools in Phase I and, to a lesser extent, Phase II;
- The Phase I assignments;
- The thesis; and
- The creation of a climate of inquiry through informal interactions with participants and staff, sometimes referred to in educational settings as the outworkings of the "informal curriculum".

My personal development has been informed by all four elements of the program.

The presentations

The presentations at the residential schools were of three types:

- Research-based lectures;

- Presentations of contemporary wisdom and consultancy practice from staff associated with the program;
- External lecturers, including leaders of higher education in the United Kingdom.

The residential schools also incorporated some small-group work.

I am an academic based in Australia, and Australian higher education policy is significantly affected by policy developments internationally, especially in the United Kingdom. Although the DBA program includes some consideration of higher education in other countries, much of the experience of academic staff and of the majority of participants in the program is United Kingdom-based. The DBA program therefore gave me an unparalleled opportunity to be exposed to policy developments in the United Kingdom both as a participant (student) and as a critical observer through class presentations and discussions. For example, in terms of understanding the Research Assessment Exercise, I was immersed in an institution which has been subject to a research assessment exercise over a number of years, students in the program also brought their perspective of research assessment exercises, academic staff had performed research on the research assessment exercise process, and external lecturers also gave us their perceptions. As a result of this, I have become quite familiar with the approaches and contemporary issues about research assessment exercises, and I have a much better base for reading about developments in research assessment policy in the United Kingdom. This is not irrelevant to Australia. As I write (April 2005), the Australian government is consulting with the higher education community about the shape that an antipodean equivalent of a research assessment exercise might take (http://www.dest.gov.au/resqual). The Australian version will be called a research quality framework, but the issues to be addressed and the approach to be followed will be informed by the research assessment exercises in the United Kingdom.

So my exposure to the formal program of the DBA has positioned me better to understand a critical contemporary policy issue in Australian higher education. A number of other examples could be used about the relevance of formal program of the DBA to my understanding of higher education policy.

Assignments

The assignment requirements for Phase 1 of the DBA involved submission of four assignments. In line with the underlying philosophical approach of a professional doctorate, I chose assignments which, in addition to being linked to the phase I curriculum, were also directly relevant to issues that were important to me in my work. The table shows the assignments that I completed for Phase I.

Table A5.1: Assignments submitted for Phase I of Doctor of Business Administration

Unit	*Assignments*	*Publication*
Unit 1 - Strategic organisational change in higher education	Turning Right at the crossroads: the Nelson Report's proposals to transform Australia's universities	"Turning right at the crossroads: The Nelson Report's proposals to transform Australia's universities." *Higher Education* **47**: 211-240, 2004.
Unit 2 - Strategic issues in higher educational development and management	Incorporating Effectiveness As A Teacher And Systematic Student Evaluation Into Probation And Promotion Decisions At La Trobe University	Under review
	Health Workforce Design For The 21st Century	"Health workforce design in the 21st century." *Australian Health Review* **29** (2): 201-210, 2005.
Unit 3 - Research methods	Staff values in the Faculty of Health Sciences at La Trobe University	Nil

Three of the four assignments (the exception being the research methods assignment) required me to undertake thinking in areas that I would have addressed, even if I had not been undertaking the DBA. However what the DBA required me to do was to address these same issues with enhanced rigour and with an awareness of the literature. In all cases I also benefited from discussions with academic staff at the University of Bath when planning the assignment, and feedback on the assignment or its early drafts.

As an academic, dissemination of the results of research and reflection is important, and so I submitted revised versions of the assignments for Units 1 and 2 to refereed journals. Two of the assignments have now been published, as shown in the table.

The third has been under review for a substantial time. Copies of the published articles are included as supplementary papers to this thesis.

The personal learnings from these assignments have been quite significant. The assignment for Unit 1 addressed the contemporary structural change being canvassed in Australia: the "Crossroads" Review of Higher Education. All leaders in higher education in Australia were required to read and understand the proposals for change advanced by the Minister for Education and Science, Dr. Brendan Nelson MP, and accordingly I would have been expected to be familiar with the Nelson proposals. The value added by the DBA was that I moved beyond a superficial review of the Government's proposals, and analysed them at a standard expected of a doctoral student and/or publication in the refereed literature. This meant that I had to have a very deep understanding of the changes; writing about the proposed changes for publication (and explaining them to others) meant that I had to have a substantially greater understanding of the changes and their implications than a simple reading of the document would entail. Because of my reading around this topic, I also understood how the contemporary proposals were situated historically, and this has given me a greater understanding about the possible trajectories of higher education policy in Australia.

The Nelson higher education policy changes introduced a Learning and Teaching Performance Fund, and, as Pro Vice-Chancellor (Learning and Teaching) at La Trobe University, I was given the responsibility within the University of positioning the University for the requirements on universities associated with the introduction of the Fund. One of these related to change in the criteria for probation and promotion for academic staff to place a greater emphasis on assessment of teaching quality, in particular through student evaluation of teaching. One of my assignments for Unit 2 was a substantial, research-based, discussion paper for La Trobe University which canvassed enhancing the use of teaching quality in probation and promotion at La Trobe University. This led to significant changes to the University's policies.

In the past student evaluation of teaching at La Trobe had been cast in a developmental frame where student evaluation results were personal to the academic concerned (in contrast to results of 'quality assurance of subjects', the results of which were considered hierarchically within the University). I suspect that the rigour with which I approached the discussion paper and the extent of the literature that I cited indicated to academics that this was not just some whinge or unthought-through set of

proposals, but that there was an evidence base for what I was recommending. I think this predisposed my colleagues to accept the significant changes I recommended. I doubt whether I would have invested the time involved in developing this paper if it were not also to be an assignment for the DBA. I subsequently submitted it in a substantially revised version for publication. I think the fact that the probation and promotion paper was a DBA assignment thus assisted in the organisational change process within La Trobe University.

The third assignment, related to health workforce issues, brought together my thinking and reflection over a number of years. Health workforce restructure is a contemporary policy issue in Australia and clarifying and documenting my thinking in this area is thus particularly useful for me. Again, I doubt whether I would have invested the energy in documenting my thoughts in this way if it had not also been a DBA assignment.

The thesis

As outlined in the introductory chapter of this thesis, the thesis too was directly related to my professional role as Dean of the Faculty of Health Sciences at La Trobe University. The Faculty had planned a values questionnaire for some time but, in the way of these things, it had never achieved management priority. The fact that it might also provide a basis for the thesis accorded it increased priority in my own work priorities; the data analysis was undertaken much more rigorously and I thought much more carefully about how the results would be used. (The DBA regulations require "an executive report for their organisation with the status of a briefing document for management on precise conclusions and recommendations arising from the study". The way in which chapter 8 of this thesis is written already highlights the recommendations arising from the study, and so an executive report would be simply a duplication of some of the material in that chapter.)

The thesis should also provide the basis for academic publications which will help fill the gap in the literature that I have identified.

The informal curriculum

The 'informal curriculum' is an important component of University study (Regan-Smith 1994, McKinney et al 1998). The DBA, as with any educational program, has such an informal curriculum, in part created by the environment in which the program is

situated, and in part by the interactions with staff and peers. The University of Bath is a research-intensive University, and so part of the expectation of the DBA was that students would read and reflect on higher education issues, to some extent regardless of the direct relevance to the lecture presentations. This I did.

As an academic I am used to reading academic journals and keeping abreast of new publications in my own discipline, but as a result of participating in the DBA, I have joined the Society for Research in Higher Education, and I now also regularly browse higher education journals in the University library in a way in which I have not undertaken in the past with the same diligence. Thus I am exposing myself to serendipitous learning and reflection on higher education issues. Similarly, I have begun to read books on higher education, and started a modest collection of relevant books. This is something that I hope I do not lose as I complete this program. This reading has made me much more aware of the research base for much of my work as a higher education manager. Similarly, my reading on the history of higher education has helped me understand better many of the contemporary debates in higher education.

One of the books I read was about leadership in higher education (Ramsden 1998). This book incorporates a questionnaire which allows a higher education manager to obtain feedback from subordinates about aspects of their management style. On further investigation I discovered that a similar questionnaire is accessible on-line (at www.feedbackbydegrees.com). This questionnaire asks the academic manager and his/her nominated peers and subordinates to assess the manager's performance on a range of leadership-related questions outlined in table A5.2

Table A5.2: The Leadership for Academic Work Questionnaire Scales

Scale	Meaning	Sample Item
Leadership for Teaching	Effectiveness of your leadership of teaching and teachers.	Conveys a sense of excitement about teaching to colleagues.
Leadership for Research	Effectiveness of your leadership of research and researchers.	Works to create an environment that supports quality research and scholarship.
Fair and Efficient Management	Capacity to perform managerial tasks such as delegation, organisation, and resource control.	Conducts the business of the work unit in an organised and efficient manner.
Interpersonal Relationships	Capacity to maintain effective working	Welcomes questioning of her/his ideas.

Strategy and Vision	Degree of emphasis on future issues and positioning the work unit for strategic advantage.	Works to create a shared vision of the future direction of the work unit.
Recognition, Development and Reward	Level of support for colleagues' personal and professional development.	Praises and supports colleagues' successes.
Collaborative and Transformational Leadership	Capacity to inspire, motivate and encourage others for change and	Encourages you to think about old problems in new ways.

Rather than developing my own questionnaire to obtain feedback on my management style, I subjected myself to the one offered through that web site. As a result I received detailed feedback from colleagues on a range of attributes. The table below summarises these results and compares my performance to other respondents to this questionnaire.

Table A5.2: Summary of results on feedback of my management style

Scale	Highest 25%	Middle 50%	Lowest 25%
Leadership for Teaching	100 - 58	57 - 29	28 - 1
	(66)		
Fair and Efficient Management	100 - 72	71 - 29	28 - 1
	(72)		
Interpersonal Relationships	100 - 86	85 - 43	42 - 15
		(69)	
Collaborative and Transformational Leadership	100 - 58	57 - 29	28 - 1
	(67)		
Recognition, Development and Reward	100 - 58	57 - 29	28 - 1
	(64)		
Leadership for Research	100 - 58	57 - 29	28 - 1
	(73)		
Strategy and Vision	100 - 58	57 - 15	14 - 1
	(81)		

To some extent the feedback was salutary and caused me to reflect on my approach to management and my style within the University and attempt some change in my style.

I have also encouraged other managers who report to me to undertake the same process with their subordinates. I doubt whether I would have read the Ramsden book if I had not been undertaking the DBA (it was drawn to my attention as part of the DBA)

nor, probably, would I have initiated the feedback survey if I had not had an expectation of completing this reflection on my learning in the DBA!

The informal curriculum also involves the opportunities associated with stepping out of the day to day pressures of the work environment. In my case it involves travelling from Australia to England, a significant distance both in kilometres and time zones. As a result I was placed in an environment where I can reflect on higher education issues on a full time basis without the day to day pressures of my work environment. This has given me some opportunities to think about new strategies at La Trobe University in a way that I would not done had I not been involved in the DBA.

The informal curriculum also involves interaction with peers. Here, too, the DBA has been beneficial. Many of my colleagues in the program face similar problems to me and informal interactions have provided a number of opportunities to debrief on the problems I am facing, and to pick up hints and suggestions about strategies that they have used in similar situations, or to address somewhat similar problems. I would like to structure some of that into my ongoing work experience following completion of the DBA.

Conclusion

The DBA, then, has benefited me professionally and personally in a number of ways. In summary, it has made me more of a research-aware professional and caused me to think more carefully about the context within which university decisions are made, and to be aware that there is a literature about many of the policy issues which confront universities in Australia today. Similarly, it has had an impact on my own approaches to management.

I would have liked a greater structure to these reflections within the program, and perhaps this is something that could be considered for residential schools for future cohorts.

I believe overall I have benefited substantially from the program and it has been a good investment for me.

Postscript

Following the conclusion of this study, leadership issues within the University became a matter of public controversy, in part stimulated by my resignation to accept a position in another state. However, the more significant issues from a media perspective arose from questioning in both the state and federal parliaments of the extensive overseas travel, and associated expenses incurred, by the Vice-Chancellor. The Vice-Chancellor resigned in the face of these challenges, as did the Deputy Vice-Chancellor and one of the Pro Vice-Chancellors. The Chancellor also announced her retirement. The Vice-Chancellor was replaced on an interim basis by the Deputy Vice-Chancellor (Research) who has adopted a much more inclusive and open approach to management, consistent with the directions suggested in this thesis. The Briefing Paper in Appendix 6 has been provided to the new incumbent.

Appendix 6: Briefing paper for University management on recommendations from the Faculty of Health Sciences' values study

As noted in Chapter 1, one of the distinctions between a professional doctorate and a 'traditional' PhD is that research for a professional doctorate has more direct relevance and application to practice. In this thesis Chapter 8 highlights conclusions from the thesis that are relevant to La Trobe University. The Doctor of Business Administration in Higher Education Management at the University of Bath also makes this link between thesis and practice explicit in a requirement to include an 'annex' to the thesis in the form of 'an Executive report for the candidate's organisation with the status of a briefing paper for management on precise conclusions and recommendations arising from the study'.

This Appendix, which draws on Chapter 8, addresses that requirement. It is in the form typically used at La Trobe University.

Recommendations to the Vice-Chancellor:

1. **The University develop and articulate a values statement**
2. **That University-wide strategies be developed to embed the values in practice**
3. **That the strategies proposed by the Faculty of Health Sciences outlined below to embed its values statement be endorsed**
4. **That the University reaffirm its commitment to academic freedom through the strategies outlined below.**

Background

1. Over the last few years, the Faculty of Health Sciences has developed a 'values statement', to reflect and articulate the shared values for staff in the Faculty. A consultative process was used to develop the statement and a Faculty-wide questionnaire was used to:
   1.1. Assess whether the values statement was universally accepted; and
   1.2. Assess the extent to which staff agreed that the espoused values were observed in practice (both in their own School/Centre and in the University as a whole).
2. In brief, the survey found widespread agreement with the articulated values statement and, with a notable exception, that the values were observed in practice.
3. Value observance was somewhat higher at the School level than within the wider University. We cannot be sure that the difference between School and University results is not simply an artefact of the fact that the values statement we were

assessing was developed in the Faculty of Health Sciences rather than for the University as a whole.

4. This paper provides:
   4.1. A background to the use of value statements and
   4.2. Makes recommendations about:
      4.2.1. Their wider use in the University and
      4.2.2. Strategies to reinforce their use in the Faculty of Health Sciences.

Values statements

5. Values statements are important for any organisation, including Universities as they help to 'set the tone' of the organisation and capture and reinforce critical aspects of organisational life and culture.
6. The culture and values of an organisation can impact on an employee and the value fit between the values of the organisation and the values of the employee can be an important factor in motivating or de-motivating the employee.
7. Further, evidence from a major study of eighteen 'visionary' companies that were more successful than their comparators identified that amongst other differences, visionary companies emphasised and held true to a set of core values.
8. *La Trobe University can benefit from this (wider) research by adopting a 'values statement' and highlighting the shared values across the University.* ***It is therefore recommended that the University develop and articulate a values statement.***
9. The feasibility of developing a values statement has been tested within the Faculty of Health Sciences. This work showed that it is possible to develop a meaningful statement that captures the sentiments of staff (both academic and administrative).
10. Specifically, the Faculty of Health Sciences values statement is as follows:

    Staff in the Faculty of Health Sciences value:
    - Putting students first;
    - Working together cooperatively and respecting each other;
    - Making a contribution to health, health care and society;
    - Excellence in teaching, research and scholarship;
    - Intellectual freedom and academic integrity;
    - A safe working and learning environment.

11. The Faculty of Health Sciences' values statement was sufficiently robust to identify some expected differences within the Faculty (e.g. between Schools and research Centres) and to identify unexpected differences (specifically, issues within the School of Nursing and Midwifery).
12. The development of the values statement and the findings from the study of value observance has provided useful information for management of the Faculty.

Embedding the values

13. *The full benefit of developing a values statement will only be achieved if it is seen to be meaningful: staff need to observe the values in action. This means that, following development of the University-wide values statement, a range of strategies need to be adopted to embed the values in practice.* ***This is recommended.***
14. The Faculty of Health Sciences has identified a number of strategies to facilitate implementation of its values statement, outlined below. **It is proposed that, pending the development of a University-wide values statement, the Faculty proceed with implementation of its agreed core values and strategies to reinforce these.**
15. The proposed strategies involve publicity about the values and changes to position descriptions with reinforcing changes to performance appraisal processes. Further changes are proposed to committee processes. Changes to some University-wide processes are also proposed.

Publicity

16. An important first step in embedding values statements is to ensure that the value statements are not forgotten. The endorsed value statements should be put before staff in a variety of ways including:
    16.1. Through posters (regularly replaced for presentation reasons) around the buildings of the Faculty;
    16.2. Being provided to staff as part of orientation to the Faculty and reinforced in face-to-face orientation sessions; and
    16.3. Being incorporated in Faculty publicity material such as the annual report.
17. Staff should be reminded on a regular basis that confidentiality protection is available to those who identify areas where values are not being observed if they report this under the University's 'whistleblower' policies or through the University Ombudsman. This may be particularly important in terms of issues relating to the value about intellectual freedom and academic integrity.
18. Staff should also be reminded regularly that protection is also afforded to staff who report breaches of occupational health and safety regulations. This would also help to ensure that the relevant value is lived in practice.

Change to position descriptions

19. Reference to the value statements should be incorporated into the preamble to position descriptions for all staff. In this regard it is proposed that all position descriptions in the Faculty should incorporate the following phrasing:

> "Staff in the Faculty of Health Sciences share six core values:
> Putting students first;
> Working together cooperatively and respecting each other;
> Making a contribution to health, health care and society;
> Excellence in teaching, research and scholarship;
> Intellectual freedom and academic integrity;
> A safe working and learning environment.
>
> The occupant of this position will be expected to work in a way consistent with those values."

20. Specific reinforcement of the value about working together cooperatively should occur by adding a clause to all position descriptions to emphasise this value, with the following phrasing as one of the position's duties:

> "To contribute to the working environment of the School/Centre by participating in decision-making and working cooperatively with colleagues and respecting their contributions."

21. Changes should also be made to the position descriptions of Heads of School:
    21.1. to give them clear responsibility to promote the values of the Faculty;
    21.2. to reinforce the value 'putting students first', by incorporating a new clause that

> "The Head of School has a key responsibility to promote adherence to the Faculty value of putting students first."
>
> (A similar change should be made to the position description of the Faculty Registrar, School Administration Managers and the Head of Faculty support services).

    21.3. to reinforce the value 'working together cooperatively and respecting each other', the Heads' position description should incorporate reference to creating a work environment where staff work together and respect each other. The specific proposed wording should be:

> "In line with the Faculty values, the Head of School should aim to create a working environment where staff work together cooperatively and respect each other."

Change to performance appraisal processes

22. Changes to position descriptions should be given meaning and force by changes to the Faculty's performance appraisal processes. Reference to the value statements and their importance should thus be incorporated in the performance appraisal

guidance used within the Faculty (known as the Performance Enhancement and Development Scheme (PEDS) Handbook).

23. In terms of changes affecting all staff:

    23.1. The "administration" section of the PEDS Handbook should be renamed the "Administration and Work Environment Section" to highlight the broader, more collegial role contemplated by the values statement. This change should be supplemented by reference to the role of all staff in ensuring cooperative behaviour in achievement of the work unit's goals.

    23.2. A reference to the value 'making a contribution to health, health care and society' should be incorporated in the community services section of the PEDS Handbook, thus strengthening the legitimacy accorded to community service activities.

    23.3. The PEDS Handbook is designed to highlight characteristics of performance that are seen as satisfactory, very satisfactory or outstanding. The value relating to excellence sits easily in that framework. To reinforce this value a statement should be added to the introduction section of the PEDS Handbook along the following lines:

> "The PEDS process is conducted within the framework of the Faculty of Health Sciences' policies and procedures, including the Faculty's values statement. Amongst other things, the Faculty values statement affirms that staff of the Faculty value excellence in teaching, research and scholarship, and the PEDS process gives recognition to that.

24. Given the importance of leaders in reinforcing and transmitting values, more significant changes should be made to the 'leadership section of the Handbook. (In addition to the general performance appraisal form used by all staff, staff in leadership positions, such as Heads of School or Heads of subsections of Schools (Departments or regional campus units), also complete a 'Leaders form'. There is specific additional guidance about completion of this form in the PEDS Handbook).

25. The value 'working together cooperatively and respecting each other' was the one where there was the highest level of endorsement across all values in the Faculty, but also one where there was a significant difference between the value and its observance. Accordingly there should be changes to the guidance in the leadership section in the Faculty PEDS Handbook emphasise the need for cooperative decision-making processes in Schools/Centres. The proposed wording is as follows:

> "A key component of the management function of a leader within the Faculty is the creation of a work environment where staff work together cooperatively and respect each other."

26. Specific reference to the values statement, and its implementation, should be made in the annual appraisal interview conducted each year with Heads of School and others in leadership positions.

Change to committee processes

27. In terms of the value a safe working and learning environment, the University and the Faculty already have processes about occupational health and safety. These can be reinforced by referring to this value statement in the terms of reference of the Faculty (and University) Occupational Health and Safety Committee. Specifically a statement should be included in the terms of reference of the Committee, as follows:

> "The Faculty Occupational Health and Safety Committee works within the policy and procedures of the University and the Faculty, including the Faculty's values statement. Staff of the Faculty value a safe working and learning environment and accordingly the role of the Occupational Health and Safety Committee is an important one in the Faculty."

Ongoing monitoring

28. Values by their nature do not change very much, but the observance of them might. The values questionnaire should therefore be repeated on a regular basis, possibly every two to three years.
29. The repeat questionnaire should be structured in a similar way to the original questionnaire to allow comparison between the results over time. However, the initial study of Faculty values identified areas where improvements could be made to the questionnaire:
    29.1. The questions about length of time that people had worked in the organisation and the precise level at which they are working yielded relatively little information in terms of identifying differences between respondents. Given the possibility that those variables could be used to identify staff, the repeat questionnaire:
        29.1.1. Should not ask staff the question about length of time in the organisation but
        29.1.2. Should use a broad grouping (e.g. administrative versus academic staff) to identify staff rather than asking questions about specific levels of appointment.

30. Monitoring via the values questionnaire should be supplemented by regular monitoring of the work environment, and specifically cooperative behaviour. A number of university-specific questionnaires addressing this construct have been developed and validated, including the University Level Environment Questionnaire and the Academic Work Environment Study. A questionnaire such as these should also be administered every two to three years

University Code of Conduct and other processes

31. The University's code of conduct indicates clearly that "the University is committed to the principle that academic freedom is essential to a proper conduct of teaching, research and scholarship". The general tenor of the Code of Conduct, and in particular the introductory statement, is one that affirms academic freedom. The University's commitment to academic freedom should be highlighted in a number of ways:
    31.1. Distributing the Code of Conduct with induction material for staff;
    31.2. Referring to this principle in the Vice-Chancellor's regular reporting to staff; and
    31.3. Distributing the Code of Conduct (via broadcast e-mail with a suitable covering note) to all academic staff every two years.
32. In order to reinforce the importance of the value about intellectual freedom and academic integrity, the University should develop a policy on acceptance of industry grants, addressing contentious issues such as the right to publication etc.
33. Once developed, the policy should be widely promulgated to ensure staff are aware of their right to highlight to senior management situations where they felt their intellectual freedom or academic integrity was compromised.
34. Staff should be reminded annually of the 'whistleblower' policy of the University and that this policy can be used where it is felt that the values of the Faculty or the University (particularly relating to intellectual freedom and academic integrity) are being impinged through management or other action.

Conclusion

35. Developing the Faculty of Health Sciences' values statement and measuring its observance has strengthened the management of the Faculty, in part by identifying a specific problem area but also, more generally, by identifying issues which might impact adversely on staff morale and job satisfaction.

36. The strategies identified in this paper are designed to address these problems and, in the medium term, improve culture and the work environment of staff of the faculty.
37. Similar benefits could accrue to the University if a similar strategy of developing a values statement and testing observance was implemented University-wide.
38. The results of the Faculty of Health Sciences' values survey are available in three forms:
    - Brief reports sent to all staff;
    - Slightly longer reports provided to the meeting of Heads of School and
    - A full report in the form of a thesis for the Doctor of Business Administration in Higher Education Management (from the University of Bath) recently submitted by me. (A copy of the thesis has been lodged in the La Trobe University library). Copies of these reports can be provided on request.

S.J. Duckett
Former Dean
Faculty of Health Sciences
April 2006

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Supplementary papers

Paper 1: Duckett, S.J. (2004) 'Turning right at the crossroads: The Nelson Report's proposals to transform Australia's universities', *Higher Education* **47**: 211-240.

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Turning right at the crossroads: The Nelson Report's proposals to transform Australia's universities

S.J. DUCKETT
Faculty of Health Sciences, La Trobe University, Victoria, 3086, Australia
(E-mail: s.duckett@latrobe.edu.au)

Abstract. During 2002, the Australian Education Minister conducted a year-long review of tertiary education under the title *Higher Education at the Crossroads*. The policy statement arising from that review was released on 13 May 2003. It incorporates a combination of new financial incentives on students and universities, potential expansion of full-fee places, and increased intrusion into university priority setting.

The policy statement promised a $A1.5b expansion in funding over four years, with more fully-funded university places, and an emphasis on improving the quality of teaching and learning.

The strategy is market-driven and could create a 'fee-culture' in Australian universities. Implementation of the new policy is not assured as it has to pass a hostile Senate. The implementation process also carries risks for government and universities. This paper describes the government's proposals and analyses their premises and effects.

Keywords: Australia, autonomy, equity, government policy, marketisation, universities

On Budget night 13 May 2003, the Australian Commonwealth government released its long awaited policy statement on the future of tertiary education entitled *Our Universities: Backing Australia's Future* (Nelson Report). If implemented, the policy proposals presage a transformation of the Australian university sector through a mix of financial incentives, increased fees for students, new opportunities to bid for project funds, and expanded regulatory intervention. These changes could lead to the most significant reshaping of the policy framework for Australian universities since the abolition of the binary divide some 15 years previously. This paper describes the context and content of the Nelson proposals and analyses their impact on the Australian university sector.

The first universities in Australia were established in colonial times by State legislatures and State legislation is still the predominant mechanism for establishing universities. Of Australia's 39 universities, 35 are established as State or Territory institutions, one (the Australian National University) by Commonwealth legislation and there are two private universities. The publicly funded multistate university (the Australian Catholic University) is also established by state (New South Wales) legislation.

The Australian university sector has evolved significantly over the last few decades. Although universities were initially funded by State grants and student fees, the late 1950s saw the development of Commonwealth interest in tertiary education and a rapid increase in Commonwealth funding and a commensurate decline in State government funding. The Whitlam Labor government abolished student fees in the early 1970s but a student contribution was subsequently re-introduced by the Hawke Labor government in 1989 through an income contingent loan scheme, known as the Higher Education Contribution Scheme, HECS (Sharpham 1997; Coaldrake and Stedman 1998; Marginson and Considine 2000; Long 2002). As originally introduced, students incurred a flat rate HECS liability for each year of study; the debt was indexed by the Consumer Price Index (CPI) and repaid via the income tax system when taxable income exceeded a threshold amount. Students were able to pay HECS upfront with a 25% discount.

Commonwealth funding to universities is now through a block grant with a relatively weak relationship between the number and type of students enrolled and the grant. Payments from the HECS scheme to universities are used to offset the block grant payment and are perceived as part of the block grant rather than a contribution by the university's students.

The Liberal/National Party Coalition (conservative) government elected in 1996 has initiated radical change in a number of portfolio areas. Tertiary education has not escaped unscathed from this policy attention as the Coalition moved swiftly to change the *status quo*. The first Coalition foray into policy change in tertiary education was in their first budget, including a substantial budget cut and slower indexation of Commonwealth funding. Indexation of grants was to be in line with the growth in the 'Safety Net Adjustment' for award wages, well below CPI and the cost growth faced by universities. The effect of the changed indexation was estimated to be equivalent to a 12–15% reduction in real terms over the period 1997–1999 (Marginson 1997). In addition, HECS contributions were increased by an average of 70% (Chapman and Salvage 1997) and restructured into three discipline-related bands. Subject placement in the bands reflected both the cost of the courses (medicine and agriculture in the highest band; humanities and business in the lowest band) and the perceived balance of private vs. social returns from tertiary education: despite their relative costliness, law was placed in the highest band and nursing was placed in the lowest band (Chapman and Salvage 1997). Universities were given an incentive to expand enrolments through introduction of 'marginally funded places'. Under this scheme, the Commonwealth government funds universities at the lowest HECS band rate (discounted by 25%) for each student they enroll over their target. Universities were also given the ability to offer places to domestic

students on a full-fee basis, with the number of full-fee places capped at 25% of the enrolment in any course.

Senator Amanda Vanstone, the first Coalition Education Minister, initiated further consideration of higher education issues in January 1997 with the appointment of a committee to review the higher education sector, headed by a former private school headmaster, Rod West. The Committee reported to the second Education Minister, Dr David Kemp, in April 1998. The West Report, as it became known, proposed far reaching reforms of the sector including proposals for a voucher-based system for higher education (Review of Higher Education Financing and Policy 1998). It recognised that such a radical development would not be feasible in the short term and proposed a staged process for reform in both teaching and learning, and in research.

The West Report's teaching and learning proposals were structured in four stages:

- stage 1; continue to fund universities on negotiated budgets but allow institutions to set fees, provide expanded support for private providers and strengthen consumer protection arrangements. Income contingent loans would be introduced for full-fee students and for any top-up fees charged by universities for publicly funded students;
- stage 2; government funding adjusted with enrolment changes;
- stage 3; a voucher system used for higher education for universities;
- stage 4; lifelong learning entitlement introduced.

With respect to research, a two-stage process was advanced, the first stage being to allocate research places in line with university performance in research and the second stage to introduce a nationwide listing of students in order of merit and allocating research places on the basis of student choice. The West Report made little immediate impact on public discourse and *prima facie* disappeared without trace. In reality it garnered some support within government and a radical proposal to introduce transferable vouchers for tertiary education (stage 3 of the West Report's Teaching and Learning plan) was the centrepiece of a leaked Cabinet submission in 1999. This proposal was derailed by vociferous public opposition and disavowed by the Prime Minister.

Dr Kemp however, had some success with sector reform. In 1999 he released a discussion paper on research policy followed later that year by a White Paper, *Knowledge and Innovation.* The Research White Paper implemented a scheme along the lines of the first stage of the West Report's research proposals. A university's share of the nationally available research degree places was allocated (and reallocated) on the basis of the university's performance on a relative research performance index involving research degree completions (50%), research income (40%), and weighted public-

ations (10%). A parallel Institutional Grants Scheme was introduced, also allocated on the basis of relative performance (but a slightly different index), replacing a small grants scheme and providing funds for institutional research support including grants and scholarships (Wood and Meek 2002).

A new Minister for Education, Science and Training, Dr Brendan Nelson, was appointed following the Coalition's election victory in 2002. Nelson, a former President of the Australian Medical Association, is articulate, ambitious, dynamic and media hungry. His approach to reforming the sector was markedly different from his predecessors. Rather than developing a secret Cabinet submission, the change process Nelson initiated was consultative, under the broad title, 'Higher Education at the Crossroads'.

Crossroads process

Foreshadowed in January 2002, Minister Nelson announced the details of a broad ranging higher education review in April 2002. An overview paper and six issues papers covering many aspects of tertiary education were released over a four-month period (see Table 1). Over 700 submissions were received and released on the departmental website: including 355 in response to the initial review paper and 373 in response to issues papers. Almost 50 consultative fora were held including a two-day final consultative forum attended by Minister Nelson.

The issues papers included presentation of data; issues as identified either by the departmental authors or in submissions made in response to the Overview paper; judiciously selected quotes from submissions; and options or issues for discussion. A 22 member Reference Group chaired by the Minister and involving seven Vice-Chancellors together with people from outside the sector was established, and a secretariat in the Department created to manage the review process. A staff member from the Australian Vice-Chancellors' Committee (AVCC) was seconded to head the secretariat for the consultation process. The consultation generated extensive discussion in the higher education and mainstream media, and even refereed journals (Karmel 2003). Although the sector was probably suffering from review fatigue (Wood and Meek 2002), the consultation process was well received as Nelson had indicated that he was prepared to consider a wide range of options for the future of the sector.

The AVCC faced a number of challenges with the Crossroads review. Factions within the AVCC had formalised over the previous five years and the AVCC appeared divided on a number of key policy issues. The oldest and most research-intensive universities, known as the 'Group of 8', were the first to coalesce and had threatened to leave the AVCC in the late 1990s. Other

Table 1. Consultation papers released as part of the Crossroads Review

Title of paper	Key issues
Higher Education at the Crossroads: An Overview Paper *Released 26 April 2002; 90 pages*	• Context of tertiary education • Experiences and outcomes of tertiary education; access; community engagement; institutional specialisation; efficiency; governance and industrial relations; revenue and funding; and 'red tape'
Striving for Quality: Learning, Teaching and Scholarship *Released 21 June 2002; 68 pages*	• Changing patterns of enrolments • Graduate outcomes • Assessing quality of teaching and learning • Valuing and rewarding teaching
Setting Firm Foundations: Financing Australian Higher Education *Released 25 July 2002; 69 pages*	• Contemporary funding arrangements • Financial performance of Australian universities • Funding models
Varieties of Excellence: Diversity, Specialisation and Regional Engagement *Released 31 July 2002; 81 pages*	• Rationale for diversity in system • Homogeneity of current system • Facilitating diversity and specialisation
Achieving Equitable and Appropriate Outcomes: Indigenous Australians in Higher Education *Released 6 August 2002; 38 pages*	• Contemporary support arrangements • Educational outcomes • Assessment of level of disadvantage
Meeting the Challenges: the Governance and Management of Universities *Released 14 August 2002; 59 pages*	• Legal and accountability frameworks • University governing bodies • University management • Industrial relations
Varieties of Learning: the Interface between Higher Education and Vocational Education and Training *Released 19 August 2002; 40 pages*	• Nature of interface between universities and Vocational Education and Training • Credit transfer

factions (such as the Australian Technology Network consisting of the large universities of technology) formed in response. The different factions had different interests. The Group of 8 was the most vociferous, publicly advocating a model for undergraduate education that involved fee deregulation, a significant reliance on private fees, and concentration of research funding

in their own ranks. The Group of 8 itself was somewhat divided as some of its prominent members, notably Professor Alan Gilbert, Vice-Chancellor of the University of Melbourne, advocated funding arrangements to support a single "world class university" in Australia. Other factions of the AVCC pursued different agendas, some publicly opposing the Group of 8 initiatives. The AVCC however, was able to develop a unified position to put to the Crossroads Review and that consensus appeared to hold during the course of the review. The AVCC submission advanced a compromise financing model which had the following elements:

- each university would have a student load target with funding based on its discipline profile;
- there should be an immediate increase in funding to improve quality and thereafter funding would be indexed;
- there should be additional student places funded to keep pace with demand;
- HECS/student contributions should be able to be varied by universities within government determined limits;
- there should be additional targeted funding to increase access for disadvantaged groups;
- there should be a review of the current research funding arrangements;
- the HECS repayment threshold should be increased to $35,000;
- a range of additional incentives or grant programs including support for universities' regional engagement; diversity specialisation and promotion of privately funded activities.

The consultation period for the Crossroads process ended in mid September 2002 and although there was speculation about the content of the Minister's recommendations to Cabinet and occasional leaks, universities generally were optimistic about the outcomes of the whole process.

The new policy

The government proposals include over 50 recommendations, ranging from some with almost trivial expenditure consequences to significant commitments of public funding and significant change to the *modus operandi* of Australia's university sector. The government estimates the total cost of the package at $A1.5b over four years, with a full-year cost after the phase-in period of $A660m p.a. (the government estimate of the four-year cost is contested, in part because of lack of clarity about phasing-in arrangements, see Kniest 2003). The general thrust of the recommendations is to provide more funding for universities, an emphasis on diversity within the

sector, accompanied by a significant increase in control and intervention into university activities.

I have grouped the recommendations in the government proposals into four areas: teaching and learning; research; expenditure and costs; and university and government processes. The Appendix lists the proposals organised into these four areas designated TL, R, E and P respectively. In line with Australian budget processes, the cost over the period of the four-year Forward Estimates (2003–07) is shown, as is the cost in the last year of the Forward Estimates (2006–07) in order to estimate the ongoing impact of the proposal after phasing-in effects (the government's policy release reports some of the expenditure in calendar years rather than the financial year data included in the Portfolio Budget Statements. These two data sources cannot be reconciled). The budget papers group a number of proposals together and so some proposals cannot be separately costed.

Teaching and learning

The centrepiece of the Nelson Report is a series of proposals that focus on teaching and learning initiatives in universities. These proposals are comprehensive, covering access initiatives (including the number of places available, the discipline mix, and equity arrangements), initiatives designed to improve the quality of teaching and learning, and strategies to enhance internationalisation.

Implementation of the new access initiatives is via a new funding relationship between the Commonwealth government (through the Department of Education, Science and Training) and the universities (this proposal is referred to as TL/1 in the Appendix). The funding agreement will be negotiated with each university and will specify the number and mix of places to be provided. The university's funding will be explicitly based on a Commonwealth discipline-specific grant per student and a student contribution. This new approach will replace the university block grant arrangements that have not explicitly distinguished the Commonwealth and student contributions. Universities will be required to enroll students within a narrow band around the negotiated target (TL/2, TL/18) with penalties both for 'constant' under-enrolment of more than 1% (loss of places) and for over-enrolments (+2% allowed; cost penalties set at the university's highest level of student contribution).

The funding agreement will specify the discipline mix as well as the total number of students to be enrolled. The existing university block grants will be reviewed to take account of discipline-mix changes since the last re-basing of the block grants that took place in 1991 (the 1991 re-basing used a set of discipline weights known as the Relative Funding Model, see Department

of Employment Education and Training 1993). A transition fund has been established to assist universities that lose funding under the new arrangements (P/2).

Significant reduction in funding had occurred over the years prior to the Crossroads review (Marginson 2002). In the lead-up to the review, there were many calls for increased funding for universities from a wide variety of commentators including the AVCC, media magnate Rupert Murdoch, and Reserve (Central) Bank governor Macfarlane. The quantum increase desired varied, but the minimum claim was to offset the previous funding reductions. The response in the Nelson Report was to provide universities with the opportunity to increase revenue from students. In line with one of the AVCC recommendations, the student contribution will be able to be determined by each university, rather than centrally specified (TL/9). University autonomy is not total in that the Nelson Report proposes a cap on the student contribution at 30% above the projected HECS rate for 2005 (the scheduled implementation date for this component of the new arrangements). Two disciplines identified as "national priorities", nursing and education, have the cap on student contributions maintained at the projected HECS level (TL/10). Universities can waive the student contribution.

Table 2 shows data on the Commonwealth grant and potential student contributions within each identified band. Assuming universities set the student contribution at the pre-existing levels, the proposals effect a marginal reduction in the total revenue relativity for business, law and humanities courses against the 1990/91 relativities, and a significant increase in relativities for the national priority areas of nursing and education, with all other relativities unchanged. At the projected HECS level, the student contribution as a proportion of total revenue varies from 81% for law to 25% for agriculture. At the maximum level of student contribution the student contribution is 85% of total revenue for law and 74% for accounting etc. Because the student contributions are based on the first round of Coalition changes to the HECS arrangements, they incorporate the same mix of policy considerations: cost of courses and perceived private returns to education.

Surety of provision and access is provided by conversion of 25,000 marginally funded places, established by universities partly in response to the incentives incorporated in the 1996 Coalition education policy, to fully funded places (TL/3). The conversion will provide a stronger incentive on universities to maintain this level of provision.

The Nelson Report proposes a marginal increase in the number of fully funded places from 2007 (TL/4) and expansion of places in private higher education institutions, targeted to areas of national priority and to meet labour needs (TL/7). There are also specific proposals to expand places in

Table 2. Government and student course contributions under Nelson proposals

Cluster	Discipline	Estimated Commonwealth course contribution 2005+	1990–91 relative funding model weights	2005 projected HECS level	Maximum student contribution 2005 (new arrangements)	Total university revenue if projected HECS student contribution	Total university revenue if max student contribution	Change in relativity: total revenue (student contribution at projected HECS	Student contribution (at projected HECS) as a % of total revenue
1	Law	$1,509	1.0	$6,427	$8,355	$7,936	$9,864	–2%	81%
2	Accounting, administration, economics, commerce	$2,481	1.0	$5,490	$7,137	$7,971	$9,618	–1%	69%
3	Humanities	$4,180	1.0	$3,854	$5,010	$8,034	$9,190	–1%	48%
4	Mathematics, statistics	$4,937	1.3	$5,490	$7,137	$10,427	$12,074	–1%	53%
5	Behavioural Science, social studies	$6,636	1.3	$3,854	$5,010	$10,490	$11,646	0%	37%
6	Computing, built environment, health	$7,392	1.6	$5,490	$7,137	$12,882	$14,529	0%	43%
7	Foreign language, visual and performing arts	$9,091	1.6	$3,854	$5,010	$12,945	$14,101	0%	30%
8	*Engineering, science, surveying*	*$12,303*	*2.2*	*$5,490*	*$7,137*	*$17,793*	*$19,444*	*0%*	*31%*
9	Dentisty, medicine, vetinerary sciences	$15,422	2.7	$6,427	$8,355	$21,849	$23,777	0%	29%
10	Agriculture	$16,394	2.7	$5,490	$7,137	$21,884	$23,531	0%	25%
National priority	Education	$7,278	1.3	$3,854	$3,854	$11,132	$11,132	6%	35%
National priority	Nursing	$9,733	1.6	$3,854	$3,854	$13,587	$13,587	5%	28%
	Postgraduate nursing (coursework)	$9,733	1.8	$3,854	$3,854	$13,587	$13,587	–7%	28%
	Postgraduate education (coursework)	$9,734	1.8	$3,854	$3,854	$13,588	$13,588	–7%	28%

Note: Cluster 8, Engineering etc. used as base to calculate relativity changes.

the national priority areas of nursing and teaching (TL/14) and in medicine (TL/15).

Further expansion of access could potentially occur through an increase in the cap on full-fee places from 25% to 50% of each course (TL/8) and providing income contingent loans for full-fee students (TL/6). The income contingent loans are capped at $50,000 per student, and unlike the income contingent loans for government-funded students that are indexed by CPI, the full-fee loans (known as FEE-HELP; HELP stands for Higher Education Loan Program) will be indexed at the CPI plus 3.5%.

There are a number of proposals to enhance equity, the largest of which focuses on geographic equity through a four-tier system of additional payments for regional campuses (TL/17). The payments are made as a loading to universities on payments under the Commonwealth Grant Scheme.

The largest loading is paid to campuses in the Northern Territory (30%). For other regional campuses, a 2.5% loading is paid for each of the following: campuses defined as non-metropolitan; campuses more than 300 km from a mainland capital city; total university enrolment less than 10,000 Equivalent Full-Time Student Units (EFTSU). A maximum loading of 7.5% is thus payable for campuses outside the Northern Territory.

The basis for the regional loading may be that regional campuses face lower demand and, given the interaction between regional access and socio-economic status (James 2001), regional campuses would be less able to charge the additional student contributions without severe impacts on access and equity. Further protection for regional universities is provided through the penalty for over-enrolments (TL/18). This is designed to ensure that the more prestigious universities in capital cities are not able to use economies of scale to attract students at the expense of regional campuses.

There are a few initiatives to assist Indigenous participation in higher education (TL/19–21) and to reward and support Indigenous staff in higher education (TL/22). There are a number of smaller initiatives for other equity groups including scholarships for the student contribution (TL/26) and for accommodation for students from regional areas (TL/27).

A major equity initiative is an increase in threshold income for payment of HECS which means that students with lower incomes post graduation will not be encumbered by HECS repayments in their early post graduate years (TL/25).

A key emphasis of the Report is on improving the quality of teaching and learning. Initiatives in this area include the establishment of a teaching and learning performance fund (TL/30). When fully operational the fund will allocate $84m per annum to universities on the basis of their teaching and learning performance.

Universities face a hurdle requirement to access the fund: they must have a teaching and learning plan/strategy. University processes must support teaching performance as a criterion in probation and promotion; provide for staff development relating to teaching; and include systematic student evaluation of teaching in probation and promotion decisions. In the second stage, funds will be allocated on the basis of yet to be negotiated teaching and learning performance indicators, including student progress and graduate employment outcomes. Other teaching and learning initiatives include expanding awards and recognition for the best university teachers, and establishing a National Institute for Learning and Teaching in Higher Education that would also fund small grants (TL/28). The audit program of the Australian Universities Quality Agency will expand to allow it to conduct audits of Australian university programs in overseas countries on a whole of country basis rather than the university-by-university approach currently pursued (TL/31). Support for outcome measures of universities such as the Graduate Skills Assessment Test will be increased (TL/32).

Finally, with respect to access, there are three small initiatives relating to promoting internationalisation of education including a loan program for students to study abroad known as OS-HELP and a program to attract overseas students to study in Australia (TL/33–35).

Research

As indicated above, the main thrust of the Nelson proposals relate to teaching and learning. There was no separate discussion paper issued on research, despite the Group of 8 arguments about establishing a world class university and a submission from the Australian Research Council. Issues of research funding have effectively been deferred through an announcement in the Nelson Report that there will be a review of the current research infrastructure funding arrangements (R/3). The Nelson Report includes only a handful of other research initiatives, the most important of which provide for the amalgamation of the Australian Institute of Marine Science and James Cook University (R/1), both based in Townsville, which may foreshadow a more general policy direction of affiliation of Commonwealth funded research institutes with nearby universities. A review of collaborative links between Commonwealth funded research organisations and universities was also announced (R/4). Another initiative, which does not involve any additional allocated funding, was approval for the Australian Research Council to fund some Chief Investigator salaries of funded research grants (R/2). This may also foreshadow a move towards a more American style research funding arrangements where research grants typically involve the researcher's salary.

Other research initiatives include establishing new international centres of excellence (R/5) and a marginal expansion in scholarships for research degrees (R/6).

Expenditure/costs

The Nelson proposals include a number of initiatives relating to institutional or system efficiency and control of expenditure. The most important of the long-term initiatives is the introduction of a five-year learning entitlement, proposed as Stage 4 of the West Report's proposal on teaching and learning. Effectively, all Australians who wish to attend university will be allocated an initial learning entitlement on 1 January 2005. The learning entitlement will be capped at five years, although the Nelson Report indicates that it could be increased for educational pathways that typically take longer than that. The learning entitlement thus caps the government contribution to a student to five years. If students are to complete their education after they exhaust their learning entitlement it will be on a full-fee basis. The Nelson Report also indicates that the government is giving consideration to provision of a subsequent learning entitlement to recognise the need for lifelong learning.

The Commonwealth strengthens control of expenditure through the replacement of the uncapped marginally funded places (where the number of places is determined by each university) by penalties on over-enrolments (E/2; linked to TL/18).

Efficiency is improved by replacing the block grant arrangements with a funding arrangement based on a university's discipline mix. Although the Commonwealth Grant Scheme does not update the outdated relativities from the 1990/91 relative funding model, the Nelson proposals provide that funding to a university will be adjusted on an annual basis in the light of its discipline mix rather than allowing more than a decade to pass before adjusting university grants to changing patterns of enrolments (E/3). Efficiency is also enhanced through the development of coherent measures of institutional evaluation (E/4) and the development of an information management system (E/5). Funding growth will be provided to universities both through conditional indexation arrangements for the Commonwealth Grant Scheme (2.5% on base in 2005; 5% in 2006; 7.5% in 2007) and because of the relative autonomy in establishing student contributions (E/7; linked to TL/9).

Processes

As well as introducing new funding arrangements, the Nelson proposals aim to change the way universities function in terms of industrial relations

and governance. Indexation arrangements for universities will be conditional on governance reform and adherence to Commonwealth determined workplace relation policies. In terms of industrial relations, a new workplace productivity program is introduced which, amongst other things, will encourage universities to follow the government's industrial agenda of increasing the emphasis on individual rather than collective bargaining (P/3). The *Workplace Relations Act* is to be amended to reduce the ability of university staff to take strike action that affects students (P/4). New national governance protocols are proposed, which would require State governments to amend the Acts establishing universities to reduce the size of most university councils (P/5).

In terms of students, the Nelson Report proposes to enshrine voluntary membership of student organisations in legislation (P/8).

Reform of the sector is to become an ongoing process: a Collaboration and Structural Reform Fund is to be established (P/7), incorporating and expanding the previous Higher Education Innovation Program. An early priority of the Fund will be proposals to rationalise course provision between universities.

Discussion and commentary

The Nelson Report sets broad directions for the sector and much needed detail is required prior to implementation. Those components that require legislation prior to implementation, e.g., the flexible student contributions (TL/9), may be amended in the Senate. However, if implemented, the proposals incorporated in the Nelson Report will have a profound impact on universities in Australia.

An ideological agenda

Clark (1983) postulated three distinct mechanisms for coordination or integration of university activity: the state, the market or an academic oligarchy. Traditionally, Australia adopted a mix of non-price based market competition (universities competing on prestige, location and 'quality') and oligarchic control (principally through structures such as the Commonwealth Tertiary Education Commission). State control was strengthened and oligarchic control correspondingly weakened in the 1987 higher education policy changes which abolished the Commonwealth Tertiary Education Commission, although oligarchic control of research remained via the Australian Research Council. Similar shifts have occurred in a number of countries (OECD 1990; Young 2002).

Table 3. Classification of policy initiatives in *Backing Australia's Future* (using reference numbers in Appendix) by type and target of policy intervention

Target	Market based (financial incentive)	Regulatory or discretionary funds
Supply side (acting on universities)	TL/3,4,7,8,11–15,17–18,20, 22–24,34 R/2,4 E/1–3,6	TL/1,2,16,19,21,28–32 R/1,3 E/4–5 P/1–7
Demand side (acting on students)	TL/5,6,9,10,25–27,33,35 R/5,6 E/7	P/8

Clark's options of state or market control can also be considered as types of government policy instruments: market-based or use of regulatory powers. Market-based interventions incorporate financial incentives to change the behaviour of market participants. The incentives can subsidise the cost of production or change price incentives faced by market participants. Regulatory or discretionary interventions use non-market or non-price strategies, either through changing regulation or legislation to facilitate, prohibit or regulate certain behaviours or introduce funding pools that do not give autonomy to market participants but require special submissions or applications to access the available funds. In terms of the targeted interventions, policy instruments can act on providers, in the case of tertiary education, universities, or can act on the demand side. The policy proposals in the Nelson Report fall across all four cells of the resultant two by two table created by this classification of policy initiatives (see Table 3).

Most initiatives in the Nelson Report are directed at changing the behaviour of universities. There are also a significant number of initiatives that are designed to change the behaviour of students, particularly to change the price signals on students thus influencing the choice of courses that students might undertake.

The initiatives acting on universities include both market-based and regulatory strategies. Financial incentives are used to change university behaviour in terms of the mix of courses and number of courses. Regulatory and discretionary strategies are also used, for example regulating access to some of the market-based initiatives. Indexation of grants, for example, will only be available if certain conditions are met.

To work effectively, market-based incentives need to operate in a system where universities understand their cost structures and have appropriate

internal incentive structures in place. Cost allocation models are not well developed in Australian universities and hence understanding of the surplus (or deficit) generated by particular courses is likely to be poor, with consequential potential of misspecification in price setting. Internal university budget allocation processes will affect a university's response to the surplus/deficit (Leslie et al. 2002; Priest et al. 2002). Unless internal incentive structures are broadly aligned with external incentives on the university as a whole, the university may not be able to respond effectively in the new environment. These internal factors are likely to lead to quite variable responses by universities that may mitigate the anticipated effects of the policy changes.

The range of initiatives which are implemented through financial incentives reflect the ideological orientation of the Nelson Report. This market orientation emphasises the market environment and may lead to the development of a "fee culture" within universities, focussing on revenue at the expense of traditional university goals.

The introduction of the learning entitlement will require all universities to give consideration to the fees they will set for out-of-time students. The effect will be that all departments in all universities will need to give consideration to full-fee arrangements and thus over time there may be full-fee students in all courses in all universities. This will inevitably change the way education is perceived with government supported and private students in every course and academic staff required to pay explicit attention to marketing issues such as the price that could be charged.

This market orientation will be further reinforced by the flexible student contribution arrangements. All universities will need to give consideration to the level of student contribution that government-funded students will be required to pay. In making this decision, universities will have to balance access and equity concerns with potential revenue opportunities. Discussion of 'price elasticity' will move from the economics lecture theatres into the Academic Board! The potential income from the increased student contribution is significant. A maximum contribution of 30% above projected HECS levels would generate between four times the funding per student (for an agriculture student) and 50 times (for a law student) compared to the government's 2.5% indexation proposed for 2005.

Students also will need to give careful consideration to degree choices. Although graduates of law and business courses achieve higher private returns from tertiary education (Borland 2003), the relativities incorporated in the new Nelson arrangements appear to overstate the private benefit. Other students will also need to evaluate the costs and benefits of different universities and their offerings. Whether students have the ability and information to make rational choices at time of selection is a moot point (Baldwin and

Jones 2000). Economists recognise information asymmetry is a ground for market failure and government intervention. The proposed Higher Education Information Management System (E/5) is the sole, inadequate response in the Nelson Report to the risks inherent in market failure. A market emphasis in the face of market failure and perverse incentives could lead to undesirable outcomes for the tertiary sector overall (Stilwell 2003).

The potential expansion in full-fee students is characteristic of the market orientation of the Report. Whether this initiative translates into a realised increase in provision depends on its take-up by universities and students. Contemporary take-up by universities and students of full-fee opportunities is modest. In 2002, there were only 5,464 full-fee EFTSU in public universities undertaking undergraduate studies not supported by employers, out of a total EFTSU of 625,052. Full-fee undergraduate students are concentrated in a handful of universities: only one public university had more than 1,000 full-fee undergraduate EFTSU in 2002, only two others had more than 500 EFTSU. These three universities account for 53% of full-fee undergraduate EFTSU. Ten universities account for 94% of the full-fee EFTSU.

The introduction of income contingent loans may make full-fee study of more interest to a number of students and, possibly, more acceptable to a wider range of universities. The experience with the HECS scheme itself is that it did not adversely impact on the social composition of universities (Chapman and Ryan 2003). The precise impact of the new income contingent loans for full-fee students is relatively unclear, as the maximum loan amount ($50,000) would certainly not cover the full cost of a course in a number of high demand areas such as law or medicine. Further, the interest rate at 3.5% above the price index could also be relatively unattractive.

A political aspect of the design of the proposals can be seen in the crafting of the regional loading. The political voice of rural and regional Australia has strengthened in recent years with the emergence of the 'One Nation' political party and the success of independents in winning seats in state and federal parliaments. The junior partner in the Liberal-National Coalition is rurally based and has become acutely atuned to its constituencies and increasingly vociferous in protecting rural interests. The regional loading, and the 2% over-enrolment penalties are testament to the power of rural interests. The crafting of the regional loading is also political: the solid Labor-voting regional cities of Newcastle and Wollongong are not designated as regional. In contrast, the campus in marginal-voting Geelong and the capital city campus of the University of Tasmania (in the home state of two of the independent Senators necessary for passage of legislation) are so designated.

The government's ideological objectives are also seen in the emphasis on ensuring voluntary student unionism, which has been the subject of regular

policy initiatives by State Coalition governments and is a totemic issue within the conservative parties, as is the pursuit of the industrial relations reform agenda. Indeed, in the Prime Minister's charter letter to Minister Nelson, industrial relations reform was the only aspect of university reform that Minister Nelson was required to undertake. The nature of the required industrial relations changes were not specified in the policy statement as released but are believed to include a requirement on universities to allow individual contract negotiations for university staff, thus weakening collective, union-led negotiations.

Anderson (2003) has highlighted the pervasive ideological basis of the Nelson report:

> The government's report draws on ideology as much as on planning and analysis of relevant evidence. Increased competition for resources within and between universities is regarded as a means of motivating them to be more efficient; as is extension of user-pays (or borrows) a device for motivating students to work harder. Ideology would also appear to the reason for proposing voluntary membership of student unions, and for extending the governments' industrial policies to workplace relations in academe.

However, the ideological orientation should not be a surprise as a market orientation has been a theme of policy for a number of years (Meek and Wood 1997). Further, the basis of many of the Nelson Report proposals can be seen in the West Report, that aimed to pave the way to a voucher-based tertiary education system.

Coaldrake (2000) has also highlighted the focus of both bureaucratic and political leadership on 'good market practice':

> ... it is notable that much of the work undertaken by the Federal Education Minister, his predecessors and the Department over recent years has been concerned with ensuring that the higher education sector operates in accordance with good market practice. That is, government has concerned itself to see that there is an appropriate array of providers of higher education, that they are managed effectively and efficiently, that students have informed choice, and that there is in place appropriate quality assurance and accountability.

Market failure, perverse university and student responses and equity concerns suggest that the ideological pursuit of 'good market practice' may both not achieve the objectives of the promoters of this policy and be undesirable *per se*.

Command and control

The mixed initiatives may reflect the tension inherent in the mixed provenance of the proposals: the bureaucratic authors emphasising regulatory or discretionary strategies, with the conservative politicians emphasising market strategies. In Burton Clark's terms (Clark 1983), the Nelson Report is strengthening both the market and the state, at the expense of academic autonomy or academic control.

The principal new regulatory or state instrument in the Nelson Report is the funding agreement that replaces the contemporary profile negotiation process. Profile negotiations were introduced as part of the Labor government reforms of universities in the late 1980s and were initially seen as intrusive (Karmel 1988) but evolved into adjuncts of a university's own planning processes (Marginson 1997) and have now become perfunctory interactions between the Commonwealth department and the universities. As with the profile process, it is likely that the new funding agreement will also have its effectiveness attenuated over a decade of implementation.

The government sees the new funding agreement as being about accountability: 'to ensure that the Commonwealth obtains, from the institution it funds, the courses and the places for which it is agreed it will be funded' (source: Mr B. Burmester, Group Manager, Higher Education Group, Department of Education, Employment and Training, in evidence to the Senate Employment, Workplace Relations and Education Legislation Committee hearing on Budget Estimates, 5 June 2003 page EWRE461).

A highly regulatory funding agreement process could be quite intrusive. The other side of the 'increased accountability' coin is reduced university autonomy and for this reason the process has been criticised by the AVCC. However, it also creates a double-edged sword for the Commonwealth. The new funding agreement process provides a policy instrument for the Commonwealth to regulate the discipline mix within universities. This new policy instrument exposes the Commonwealth to a policy risk in that the Commonwealth can now be seen to be responsible for the discipline mix of graduates and hence the local, state and national labour market consequences of the tertiary sector's graduation profile. This introduces a new set of accountabilities for the Commonwealth Minister and also requires a new set of skills within the Commonwealth Department. There is no recognition in the Nelson Report as to either the need for a skills upgrade in the Department or about the advice structures that may be needed to provide input into the Commonwealth negotiating position on appropriate discipline mixes.

Detailed determination of a university's discipline-mix will need to involve very sophisticated regionally-based labour market intelligence. It is unlikely that Commonwealth bureaucrats will be as aware of emerging tech-

nologies (and associated educational requirements) as either university-based researchers or industry advocates. The contemporary decentralised approach to responding to emerging needs probably leads to greater university responsiveness than a centralised system which requires recognition of and response to labour market needs to be funnelled through Canberra.

The funding agreement negotiations are going to be further constrained because the Commonwealth will not have power to force universities to adopt a particular discipline mix, especially when some of the disciplines for which the Commonwealth has identified a labour shortage (through immigration arrangements) would be seen as being underfunded in terms of the old relative funding model carried over into the new funding arrangement.

The Nelson Report contemplates a greater role for state education authorities: they will be consulted on labour market issues and state government support is required to legislate for the new governance protocols. This involvement provides another arena for intrusion into university affairs. Policy responsibility and the main financial levers remain with the Commonwealth, but universities are created by state legislation, with states now having a greater potential to shape university activities in the state. State and federal interests may not be coincident, enhancing regulatory confusion.

A positive of the Nelson Report is the conditional indexation of the Commonwealth grant scheme for 2005 to 2007. However, other elements of the package (including the student contribution) are not indexed, nor is there any guarantee of indexation of the Commonwealth grant after 2007. In the absence of systematic arrangements for indexation, inflation will undermine university finances in the medium term and weaken universities' ability to plan for the long term. This 'drip feed' approach will give further opportunities for government and bureaucratic control and intervention at the inevitable next round review caused by this failure to recognise system dynamics.

Improved access?

Although the Nelson Report is couched as a significant expansion of funding and improvement in access, the precise impacts on access are likely to be modest at best and may even lead to a reduction in access. One of the major funding proposals is the conversion to full funding of 25,000 marginally funded places. However, in 2002 there were 32,000 marginally funded places in universities so this represents a reduction in access to government funded support.

This reduction in access will occur differentially and could have an extreme impact in some geographic areas. The conversion from marginally funded to fully funded places will not maintain the current distribution of university places, as there will be a redistribution to equalise the participation

rate in higher education across Australia. Implementation of the conversion process will thus involve a redistribution of places away from higher participation states such as South Australia and Victoria, to lower participation states such as Queensland and Western Australia. This will significantly reduce opportunities for government-supported education in the losing states. It is also likely to have an adverse impact on equity as wealthy students respond to the lack of access by availing themselves of full-fee places and poorer students are forced to eschew a university education because of the high interest rates and inadequate loan support for full-fee programs.

The small number of additional fully funded places to be provided from 2007 neither offsets the loss of existing marginally funded places nor meets the likely growth in demand for university places given the population projections for the relevant age cohorts.

The new funding agreement process may change relative access for the different disciplines. Since 1990 when the last re-basing of university grants was undertaken, total enrolments in universities have increased by about 30% with much faster growth in popular and lucrative disciplines such as law and legal studies (123% growth) and business (66% growth) with slower growth rates in less popular areas (agriculture, 13% growth; engineering, 26% growth) and in areas which are expensive to teach and were not adequately funded under the old relative funding model (most notably health, growth 29%). There was an absolute decline in education (–7%). The change in weights for national priority areas means that the new funding arrangements disadvantage those universities that moved places from nursing (relatively advantaged under the Nelson report) to disciplines such as law and business which will now have low funding from the Commonwealth under the Commonwealth Grant Scheme. Universities that have done this are probably the major losers in the new arrangements. Whether they have the ability or the will to reverse those changes to maintain their overall grant funding is doubtful.

The introduction of the five-year learning entitlement will reduce access for students who wish to change disciplines. In the absence of any clarity about the 'top-up' to the entitlement, graduates who have exhausted their learning entitlement will be required to enroll in subsequent courses as full-fee students. This will have an immediate access effect and many students are likely to be deterred from study. A number of programs (especially professional programs) have significant numbers of graduates transferring disciplines enrolled and the introduction of the learning entitlement policy may reduce demand in these programs. End-on bachelor degree programs, such as the two-year Bachelor of Social Work programs for graduates, will be particularly affected.

As the learning entitlement is capped at five years, students enrolled in double degrees will have relatively less forgiveness in the case of extended study than single degree students. Double degree programs could therefore become less attractive to students and less viable to universities, adversely impacting on student choice and opportunity.

The chance and challenge of implementation

Implementation of the Nelson Report proposals is problematic at three levels: government, department and university. The Opposition and the Australian Democrats have vehemently attacked the Nelson Report proposals. As the government does not have a majority in the Senate, the fate of the Nelson proposals rests on the government being able to persuade the four independents in the Senate to support the broad thrust of the proposals. Minister Nelson has indicated that the proposals in the Report are a single package and he will not negotiate and allow 'cherry picking' of the package in the Senate. These brave statements are of course simply part of the negotiating process and it is likely that there will be compromises and changes to the package before it can be implemented. The Senate has referred the Nelson Report to a Committee for report back by 30 October 2003 (two independents voting for referral, two against). This will give further opportunity for public airing of the weaknesses in the Report and the impact on individual universities.

Any change in the funding basis of universities obviously leads to winners and losers. It is the nature of politics that the winners will be quiescent and the losers vociferous (Easton 1979). The government's modelling of the financial impact on universities, released two months after the budget package, revealed that even assuming all universities meet the conditions to achieve the indexation funding, seven universities will be worse off in 2005. In response, the government increased its Transition Fund, from the $12.6m announced in the budget, to $38.6m. After removing the indexation effect, a further two to six universities would be disadvantaged by the new system, depending on assumptions about the composition of the operating grant. The number of universities that lose on the package will increase once the administrative costs of the new scholarships and increased accountability, which fall on universities, are identified and taken into account.

At the departmental level, the Commonwealth Department of Education, Science and Training (DEST) also faces challenges with implementation. The new funding agreement will require a new set of information gathering and negotiating skills. If the funding agreement negotiations are to be other than the symbolic interactions of the current profile process, then the departmental negotiators need to be armed with information about labour market and student demand, and to be informed of the ability of the university to respond

to either or both of these factors. A university will always be better informed of its own processes and costings than external parties and obfuscation and dissembling may begin to characterise the negotiation process. DEST will need to work closely with other Commonwealth departments with an interest in the labour market (particularly immigration, employment and workplace relations, and health) to ensure that the various arms of government are pursuing similar policy priorities in terms of disciplines in shortage. State departments of education, proposed to be consulted by the Commonwealth as part of labour market planning, have limited experience (and skills) in this area, and will therefore also face a staff development challenge.

The Nelson Report presents real challenges for universities themselves. University costing systems will need to be strengthened and incentives on sub-units of the university, and possibly academics, will need to be more closely aligned with the incentives on the university as a whole.

The penalties for over-enrolment will also cause implementation challenges for universities. The 2% threshold is extremely tight and has been widely criticised. Student preferences and take-up of offers of places can vary widely from year to year, as can re-enrolment patterns. Uncertainty is greater in courses with smaller enrolments and so the narrow band of allowable over-enrolment will be of particular concern for niche courses and regional campuses that generally have smaller enrolments. Universities will need to develop much tighter internal control systems to manage their risk in this area. Universities will probably also increase their reliance on later round offers to new students to reduce uncertainty about acceptance to offer ratios. This will increase uncertainty for students.

The tight enrolment band also reinforces the ideological agenda, with strong incentives on universities that additional enrolments be full-fee rather than subsidised. Full-fee students will also provide a cushion against under-enrolment, as a university would be able to offer full-fee students a transfer to a funded place if the university were at risk of losing places.

The over-enrolment penalty is set at the university's highest level of student contribution regardless of whether this course is the cause of the over-enrolment. The impact on an over-enrolling academic unit could be severe: not only teaching the additional students for no funding, but losing more than the total funding for the equivalent number of funded students. Thus, if law charged the maximum student contribution and the over-enrolment was in humanities which charged projected HECS, depending on internal university funding policies, humanities could be penalised the full cost of the law student contribution.

The new incentives on universities, the governance protocols and the need to respond to government intrusion will further strengthen central control mechanisms within universities, a trend already in evidence in

Australian universities (Marginson and Considine 2000). Depending on a university's internal organisational structure, control by either the raft of Vice-Chancellors, Deputy Vice-Chancellors and Pro Vice-Chancellors; by 'Super Deans'; or both groups, will be strengthened.

The discourse of university management will be about how each is 'positioned' in the new market place. Choices about the level of the student contribution will send messages about prestige. Choices about how to deal with existing over-enrolments will shape the future discipline-mix.

Conclusion

Minister Nelson's rhetoric since the release of the government's proposals has emphasised the choices universities can make, disparaging previous policies as 'one-size-fits-all'. In reality, universities will have few real choices. Indexation funds will only be available if the government's industrial agenda is followed. Funding to catch up the funds shortfall of previous years will primarily come from increases to student fees through the new flexible student contributions, with the resultant political opprobrium of the escalating costs of university study transferred to universities themselves.

Minister Nelson has not highlighted this market transformation of universities, however, his rhetoric of choice de-emphasises the realities facing universities. Under the Nelson proposals, the Australian university sector will inevitably become more market oriented. Fee setting and positioning in terms of pricing will become key policy instruments and strategic choices for university. Universities will, at a minimum, need to specify fees to apply to students who have exceeded their learning entitlement and growth in full-fee places in the prestigious universities can be expected to occur. Student participants in the market will face higher costs, albeit costs deferred under HECS and income contingent loans. University internal discipline-mix choices will have direct consequences in terms of funding. Universities face significant penalties if they position themselves inappropriately in the market and either over-enroll or under-enroll. New incentives are placed in front of universities to change their behaviour.

The effect of these changes to the external environment of universities will be profound. Internal changes to management structures, processes and information systems will be required. The external and internal challenges will wreak changes in internal cultures, emphasising fees, market position and responding to external, government-determined incentives. Dr Nelson's prescription for Australia's universities will indeed lead to a major transformation.

Surprisingly, the Nelson Report did not address a defining issue in university policy, deferring consideration of research issues, instead announcing

reviews of infrastructure funding (R/3) and collaborative arrangements (R/4). This strategy constrains future policy options by limiting the extent to which research funding can be increased by redirection of existing operating grant funding. This deferral leaves unaddressed the relationship between teaching and research and the aspirations, articulated by the Group of 8 universities, for increased funding to establish one or more 'world class' research-intensive universities in Australia.

The Crossroads review process was seen positively by the university sector. This positive disposition has continued after the release of the Report, at least for those in leadership positions: the AVCC is strongly supportive of the initiatives in the Nelson Report, possibly because salient aspects of its preferred funding model were adopted in the Report and most Vice-Chancellors support, at least covertly, the expected industrial relations changes required for indexation.

Implementation of the Nelson report will lead to a stronger emphasis on the market and fees as well as significantly increased intrusion by government into governance and internal processes of a university, industrial relations and working conditions of staff, and the number and type of students that universities can enroll. The increased intrusion may reduce university responsiveness to emerging labour market requirements, with a consequential adverse impact on the development of an appropriately prepared workforce. Students will face increased debt burdens and probably reduced access to government funded places. This is likely to have an adverse equity effect.

The uncertainties about implementation mean that the overall impact of the changes cannot yet be estimated. The underpinnings of the changes provide a clear direction and represent an attempt by government to emphasise a price-based market orientation in the university sector, that is, a right turn at the crossroads. The final destination, however, is still unclear.

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Appendix. Proposed changes to Australian higher education policy in backing Australia's future

Target of proposal	Proposal		2006–07 cost ($m)	4-year total cost ($m)
1. Teaching and learning				
Access				
• Number/participation rate	TL/1	Negotiated Funding Agreement with each university on number and mix of places.	—	—
	TL/2	Redistribution of unfilled places if target is not met consistently.	—	—
	TL/3	Full funding of 25,000 places to replace marginally funded places.	?	347.6
	TL/4	1,460 new general places from 2007.	10.9	10.9
	TL/5	Continuation of income contingent loans for students (renamed HECS-HELP); lower discount (20%) for upfront payment.	(37.2)	(76.3)
	TL/6	Extension of income contingent loans to full-fee students (up to $50,000 max) indexed at CPI + 3.5%.	Incl in TL/5	Incl in TL/5
	TL/7	745 additional places in private higher education institutions (113% increase) targeted to discipline areas of priority (2008 cost shown in 2006–07 column; four-years costs included in TL/14).	22.1	?
	TL/8	Increased maximum fee-paying places from 25% to 50% of course.	—	—
• Discipline mix	TL/9	Differential student contributions by discipline and university.	—	—
	TL/10	Lower cap on student contribution for 'National Priority Areas' of nursing and teaching.	—	—
	TL/11	Additional funding per place for teaching from 2004.	?	40.4
	TL/12	Additional funding per place for teaching from 2005.	?	81.4
	TL/13	234 new medical school places.	15.8	42.1

Appendix. Continued

Target of proposal	Proposal		2006–07 cost ($m)	4-year total cost ($m)
	TL/14	Expansion of 'National Priority' places in nursing (210 nursing places in 2004 rising to 574 places in 2007, all in regional areas; four-year cost: $17.1m) teaching and Indigenous education.	51.8	161.0
	TL/15	Introduction of full-fee places in medicine capped at 10% of enrolment.	—	–
	TL/16	Discipline mix variations will be compensated up to 1% above agreed discipline mix.	?	?
• Equity	TL/17	Additional payment for regional campuses.	32.9	122.6
	TL/18	Penalties for more than 2% over-enrolment.	—	—
	TL/19	Establish Indigenous Higher Education Advisory Council.	0.3	1.2
	TL/20	Increased funding for Indigenous Support Fund.	5.3	10.4
	TL/21	Enhanced performance expectations for Indigenous Support Fund.	—	—
	TL/22	Scholarships for Indigenous staff.	?	?
	TL/23	Increased funding and review to develop new funding formula for Higher Education Equity Program.	2.4	7
	TL/24	Increased funding for Students with Disabilities program.	1.1	3.3
	TL/25	Increased threshold income for repayment of HECS-HELP.	Incl in TL/5	Incl in TL/5
	TL/26	Up to 5,075 Commonwealth Education Costs Scholarships p.a. paying up to $2,000 p.a. for four years.	70.7	84.4
	TL/27	Up to 2,030 Commonwealth Accommodation Scholarships p.a. paying $4,000 p.a. for four years.	Incl. In TL/26	75.8

Appendix. Continued

Target of proposal	Proposal		2006–07 cost ($m)	4-year total cost ($m)
Quality	TL/28	Establishment of National Institute for Learning and Teaching in Higher Education (around 90% of expenditure to be on grants).	22.4	44.3
	TL/29	Increase in awards for university teachers.	2.7	5.4
	TL/30	Establish Learning and Teaching Performance Fund.	83.8	138.5
	TL/31	Support for overseas audits by AUQA.	0.6	1.8
	TL/32	Enhancement of Graduation Destination Survey, Course Experience Questionnaire and Graduate Skills Assessment Test.	0.3	0.9
Internationalisation	TL/33	'Endeavour Program' of up to 395 awards for overseas students to study in Australia.	?	7.9
	TL/34	Support for language teachers to undertake short term study abroad.	1	?
	TL/35	Introduction of income contingent loans for students in Study Abroad programs ($5,000 max per semester).	—	—
2. Research	R/1	Affiliation between Australian Institute of Marine Science and James Cook University.	—	5
	R/2	ARC to fund some Chief Investigator salaries.	—	—
	R/3	Review of research infrastructure funding arrangement.	—	—
	R/4	Review of collaboration between universities and public research organisations (such as CSIRO).	—	—

Appendix. Continued

Target of proposal	Proposal		2006–07 cost ($m)	4-year total cost ($m)
	R/5	Establishment of four International Centres of Excellence (Asia Pacific Study and Diplomacy; Mathematics Education; Water Research Management; Sports Science and Administration).	?	35.5
	R/6	Increase of up to 31 in Australian Postgraduate Awards (scholarships for research degrees) – approx 0.7% increase.	Incl in TL/26	Incl in TL/26
	R/7	Funding for young researchers to attend overseas conferences (total of six weeks p.a. funded!).	?	1
3. Expenditure/costs				
• Total expenditure limit	E/1	Introduction of five-year capped (initial) Learning Entitlement from 2005.	—	—
	E/2	Replace uncapped marginally funded places by penalty on over-enrolment (savings not identified in Budget documentation).	—	—
• Institution/system efficiency	E/3	Common wealth Grant Scheme (CGS) to replace block grant.	—	—
	E/4	Implementation of Institutional Assessment Framework.	?	?
	E/5	Higher Education Information Management System.	5.3	30.3
• Indexation/funding growth	E/6	CGS funding indexed (but below cost growth).	209.2*	430.1
	E/7	Universities to have some autonomy in setting student contributions (ranges set for course bands).	—	—

Appendix. Continued

Target of proposal	Proposal	2006–07 cost ($m)	4-year total cost ($m)
4. Processes			
• Personnel	P/1 Growth per student funding to universities conditional on governance reform and workplace relation policies.	—	—
	P/2 Establishment of Transition Fund to facilitate institutional restructure.	—	12.6 initially, revised to 38.6
	P/3 Introduction of Workplace Productivity Program	27.9	55.2
	P/4 Amendment to Workplace Relations Acts to toughen criteria for protected industrial action.	—	—
• Governance	P/5 National Governance Protocols proposed.	—	—
	P/6 Creation of Association of Governing Bodies of Australian Universities.	?	?
• Collaborative	P/7 Creation of Collaboration and Structural Reform Fund.	6.8	20.0
• Students	P/8 Optional membership of student organisations.		

Source: *Our Universities* and *2003–2004 Portfolio Budget Statements* for Department, Education, Science and Training.
Notes: 1. Some proposals listed under more than one category.
2. — indicates proposal with trivial cost or absorbed in Departmental expenditure; ? indicates cost not able to be ascertained from sources; * indicates 2007 calendar year estimate.

medical practitioners are male; males make up 59% of generalist medical practitioners, compared with 8% of registered nurses and 18% of physiotherapists.[2]

The health workforce has grown substantially over the last 40 years. The 1961 census, for example, recorded a total 72 598 health professionals (that is, people with health professional qualifications, whether employed or not), 56% of whom were registered nurses, 16% medical practitioners, and the remaining 28% all other health professionals. By 2001, the health workforce had quadrupled to 291 604 with nurses now accounting for 59%, medical practitioners 17%, and others 24%. The number of health professionals per head of population increased from 6.9 per 1000 population in 1961 to 15.4 per 1000 population in 2001.[2]

The health workforce is now characterised by a large number of separate professions, each with a different course of preparation, a different emphasis in practice and, to some extent, a different ideological foundation in terms of the way in which the profession interacts with other professions and with patients or consumers. The workforce has changed dramatically over the last 20 years with increasing specialisation both within professions (for example, additional specialisations in medicine and nursing) and also by the creation of new professions. To some extent, this specialisation has led to increased quality of care as individual professionals have been able to develop in-depth knowledge and skills across a narrower range of areas.[3] However, by the late 1990s there was recognition that this increasing specialisation may have a downside in increased coordination costs, leading to inefficiency and problems of continuity of care.

The changing context for the workforce

The context within which the health workforce operates is changing. Life expectancy in Australia has been increasing steadily over the last century, increasing by 3 years for females and 4.5 years for males over the period 1981–1998. However, disability-free life expectancy has declined for both males and females: about half to two-thirds of the increase in life expectancy entailed a period of severe handicap.[4] This trend of increasing severely handicapped expectancy is also apparent in the figures for trends in health expectancy at age 65.

The increase in years lived with disability changes the nature of the demand on the health system. Chronic disease, by definition, cannot be cured by a pharmacological solution — the so-called magic bullet. Rather, chronic disease needs to be managed over its course, drawing not only on the skills of medical practitioners and nurses but also the skills of the range of professions that have emerged over the last century, including physiotherapy, occupational therapy and social work. As more separate workers are involved in the care process, this increases the demand for different forms of practice involving coordination, integration and teamwork.[4] Further, because chronic disease continues over a long period, its increasing prevalence places a concomitant requirement on systems to improve continuity of care between the professionals involved and to ensure that the consumer is able to develop an ongoing relationship with the care team.

As well as living longer (and living longer with chronic disease), the Australian population is growing and the elderly population over 75 is growing faster than the population as a whole. The impact of this on health services is complex. During the 1990s, hospital admissions of the "old old" (those over 75) almost doubled (increase of 89%), but because of the decline in length of stay, bed-days only increased by 12%, and there was a 10% decline in the rate of use (bed-days) per thousand population over 75.[5] If these trends continue, despite the decline in rates of use the increased numbers of elderly will lead to increased demand for care and for the skills necessary to manage chronic disease.

In addition to the epidemiological and demographic transition, the environment for the health workforce is also changing because of wider social trends, in particular the impact of changes in information and communication technologies (ICT). ICT changes impact on the way in which

health professionals interact with consumers, with other professionals, and with payers. ICT is changing the knowledge base of consumers, especially those with chronic conditions, and contributes to empowerment of consumers, thus changing the relationship between the professional and their client. ICT applications to the health sector are still in their early stages, and there has been little rigorous demonstration of clinical or economic benefits of these new applications, although the potential is clearly great.[6]

Anderson and Stenzil[7] have claimed that developments in ICT could lead to "a real increase in physician productivity of 50% or more over the next 10–20 years ... (including by) substituting 'e-visits' for office visits" (p. 3). ICT development could lead to improved patient-to-provider communication, including the use of web-enabled telephone triage providing advice by telephone to potential patients to assist in determining the appropriate response to their health care needs. The most noteworthy of these internationally is NHS Direct in the United Kingdom.[8] The first large-scale Australian call-centre development (Health Direct) was established in Western Australia in 1999 with promising results.[9]

Multidisciplinary care plans which systematise the treatment and care processes are increasingly part of hospital and ambulatory care.[10,11] ICT-facilitated access to state of the art care paths and protocols changes the nature of the required educational preparation for health professionals. Currently, professional education is based on a "just in case" model of attempting to acquaint students with skills and knowledge to prepare them for a wider range of conditions than might possibly be faced in practice. In the future, service delivery (and provider knowledge) could be on a "just in time" basis where care protocols can guide the professional through the diagnosis and treatment process.

Supply and substitution: critical issues for the future

Each of the major health professions is facing major challenges to their *modus vivendi* in the early years of the 21st century, particularly realignment of responsibilities among the professions and adequacy of workforce supply.

A review of nursing education in Australian universities in 1994[12] identified a range of policy issues affecting the nursing workforce, including labour force planning, career pathways and educational preparation. In its report, the review made a large number of recommendations for change and development that received little policy attention. National policy interest in nursing was reawakened in 2001 with two inquiries being established, one by the Senate[13] and one by the Commonwealth government.[14] Both national reviews recognised there were significant problems in workforce planning for the nursing profession. The 2002 National Review, for example, highlighted (p. 107):

- the lack of long-term planning for the health workforce and nursing specifically;
- fragmentation of the responsibilities for different aspects of nursing and nursing education.

Both reviews identified critical shortages of nurses (see pp. 14–17 and 48–52 of the Senate report and pp. 188–9 of the 2002 National Review). The extent of the shortage of general nurses has been estimated at between 6500[15] and 40 000[15] by 2010, the range being symptomatic of the parlous state of workforce planning in the sector. Shortages of nurses are also reported in the USA and in other countries.[16,17] Given the international migration of nurses, recruitment of Australian nurses to work overseas might exacerbate the forecast shortage. Response to the shortage has included provision of only 610 additional nursing places in universities (210 in response to the Nelson Review of Higher Education and 400 places focussing on aged care) but, given the magnitude of the forecast shortage, restructuring of the workplace and changing demand patterns for nurses must also be considered. This may be facilitated through a new Nursing and Nursing Education Taskforce established by the Australian Health Ministers' Advisory Council to address the recommendations of the Nursing Review.

The role of nursing

A major issue for nursing workforce policy in the medium term therefore relates to the role of the professional (registered) nurse. Without clarification of the role of the nurse, there cannot be clarity about how many nurses are needed in the workforce, and educational institutions will find it difficult to make coordinated decisions about design of curricula and the appropriate number of nurses that ought to be enrolled in nursing education programs.

The role of the nurse is the subject of a number of pressures, posing both threats and opportunities for the profession.[18] In the first instance, the educational preparation of all nurses is improving, associated with the move to university-based education and the continuing refinement of university curricula.[19,20] This broader educational preparation of nurses provides a foundation for nurses to undertake more complex roles and tasks. Failure to provide challenges in the workplace may lead to dissatisfaction among nurses who have contemporary levels of educational preparation, and may affect retention. There is now a developing body of literature about the potential for nurses to undertake roles that were previously the sole preserve of doctors.[21-24]

Nurses can substitute for general practitioners in many primary care tasks, for resident medical officers in intensive care units, and can undertake high level triage and treatment functions in hospital emergency departments. Midwives also play a significant role in maternity care. In Australia, most experience in substitution has occurred in areas that are less likely to attract medical practitioners (for example rural areas, aged care, services for Aboriginal people and Torres Strait Islanders) and hence substitution strategies have not caused conflict with the medical profession.

Opportunities for substitution would be substantially greater if nurses had independent prescribing rights (either for a limited range of drugs, or according to specific protocols). The extent to which nurses should have independent prescribing and practice rights is thus a critical issue for determining the future role of the nurse. It is also likely to be a contentious one, attracting opposition from the medical profession, as did the transfer of nursing education to universities in the 1980s.[25]

Potential impacts on the medical workforce

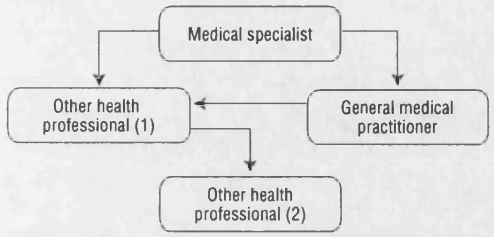
Changes in the role of nurses will have impacts on other professions, particularly medical practitioners. A critical issue in medical workforce planning thus relates to the future role and place of the medical profession. As argued above, there can be considerable overlap in the roles of nurses and medical practitioners in primary care and in major hospitals. Given the difficulty of attracting medical practitioners to rural areas, a nurse-led strategy would seem to form a key part of addressing rural medical workforce shortages. Similar strategies could also be applied in metropolitan areas.

There are also potential overlaps in some areas of the specialist workforce. For example, in the United States, nurse anaesthetists play a significant role in the provision of anaesthetic services, complementing and substituting for medically qualified anaesthetists. In the US and the United Kingdom, podiatric surgeons undertake some orthopaedic surgery which in Australia tends to be the preserve of orthopaedic surgeons. These issues of substitution and role clarification are going to become increasingly important as the cost of educating nurses, podiatrists, and others is substantially less than educating medical practitioners, as are their average earnings. It may be more cost-effective for there to be wider use of alternative personnel in provision of health care, subject to ensuring that the time taken to perform similar tasks is around the same and that the quality of care is not affected. In the long run, however, wage creep might change the salary relativities. Identifying what is the unique role of medical practitioners then becomes an important issue for policy.

Substitution and skill transfer

Although there is currently a perceived shortage of nurses, an expanded role for nurses could assist in retaining nurses in the workforce or

Skill transfer options



attracting new entrants seeking better career prospects. A small shift of nurses to performing new roles would yield a substantial increase in the supply of services previously provided by other professionals such as medical practitioners. But substitution strategies are not only relevant in the technically advanced component of a professional's role. As professional roles at the high end are accreted, substitution of less cognitively dense tasks should also be considered. This will require changes in the roles of a number of professions, for example substitution between registered nurses and enrolled nurses or nursing assistants, and between allied health professionals and allied health assistants or multiskilled workers (see the Box).

The health sector is at a critical juncture, requiring a major rethink of the way its workforce is organised. Significant shortages are foreshadowed in nursing, the largest of the health professions. Changes in the organisation of medical work in hospitals, and the reduction in average hours worked for medical practitioners, also presage further workforce change. Calls for workforce redesign are often made in the context of a perceived workforce shortage. However, as argued above, roles within the health sector are in transition, and static role and productivity assumptions are thus not reasonable.

The health workforce is an input into provision of health services, and therefore health workforce planning should not simply be concerned with planning the numbers required in each profession (based on assumptions of continuation of current roles and current productivity patterns) but, rather, should focus on planning the provision of professionals with the mix of skills necessary to ensure adequate provision of services. Further, expanding intakes into health professional courses will not be sufficient to meet the emerging needs. New roles and new patterns of working will be required, but at present the health sector does not have the right structures to facilitate a rethink of workforce roles, let alone implement them.

Workforce substitution may involve conflict between the health professions. The interests of the professions are not coincident because substitution affects the professions differentially. Nursing staff may substitute for medical staff in rural communities; similarly, substitution can also occur in major teaching hospitals where nursing staff could appropriately substitute for some medical staff in intensive care units, cancer treatment, emergency departments, and patient admissions. In some states, hospital funding design militates against such substitution, for example by providing a significant subsidy for employing hospital-based registrars. There are similar possibilities for substitution of allied health for nursing staff (and vice versa) and other non-medical disciplines for medical practitioners.[26]

Required changes in educational preparation

Epidemiological, technological and social changes have led to increasing challenge to the monodisciplinarity of health workforce preparation. The challenge has been global, with calls for reform to health professional education in most countries. Health sector reports have decried the inadequacies of existing educational preparation, with particular emphasis on the need to restructure education to provide a greater emphasis on teamwork and interprofessional issues.[27] There have also been calls to facilitate career transition and the development of clearer, articulated career ladders.[28]

Educational preparation for the health workforce has not kept pace with changes in the environment. Although education of health professions has been by no means static, new needs

have typically led to development of niche professions rather than reorganising professional boundaries to meet new needs.

Reform to promote teamwork, interprofessional ways of working, and flexibility in the workforce has been recommended by many reviews. The educational sector response has principally been to make marginal adjustments to the existing monodisciplinary frame of educational preparation: existing single profession educational programs have been adjusted to incorporate more multidisciplinary activities. These activities have been of a number of kinds, including shared lectures, shared small group activities and shared clinical placements. Shared lectures are efficient and may provide a common base of knowledge across professions. However, shared lectures represent a model of "learning alongside" rather than "learning together" so may not have an enduring impact in terms of improving interprofessional work post-graduation. In contrast, shared clinical placements can provide very powerful formative experiences,[29] but the challenges are still great.[30]

Although there is voluminous literature on interprofessional education programs,[31-38] its methodological quality is poor and does not lead to any solid conclusions about its impact on professional practice or health care outcomes.[39-41]

Despite implementation of interprofessional education and teamwork development strategies in a number of educational institutions, there have been a number of calls for more fundamental reform to educational preparation[42,43] and subsequent analysis of the issues associated with major changes to workforce roles.[44] In the United Kingdom, the Schofield report on the future of the health workforce presented an articulate case for the creation of a multiskilled health worker with a range of competencies[45,46] That report identified a number of weaknesses of the existing monodisciplinary training, including forcing early career choice, and weaknesses in understanding the roles of other groups. In the workplace, the existing professional structures were seen to lead to inflexibility in staff deployment; lack of clarity of roles and thus reduced accountability; and increased time spent in coordination of care. The report proposed increased use of multiskilled health workers with a range of competencies. In acute care, for example, the Schofield multiskilled worker would have a role including:

- the current nursing workload;
- prescribing and dispensing in line with treatment guidelines;
- the majority of the current physiotherapy, occupational therapy, and speech and language therapy workloads; and
- making decisions to admit and discharge in line with treatment guidelines.[45]

Possibly in response to that challenge, the NHS Modernisation Agency has embarked on a number of projects to develop multiskilled health workers (see, for example, http://www.kingstonhospital.nhs.uk/jobs/hcp.htm). Nearly all countries have skill-mix imbalances[47] and changing skill-mix projects are being increasingly reported in both developed and developing countries.[48]

Within Australia, the most recent government statement on workforce reform was issued by the Australian Health Ministers' Conference in April 2004 in the form of Australia's first "National Health Workforce Strategic Framework"(see http://www.health.nsw.gov.au/amwac/pdf/NHW_stratfwork_AHMC_2004.pdf). The framework, to set directions for the next decade, recognised that realignment of existing workforce roles or the creation of new roles may be necessary. The framework endorsed a range of strategic directions including:

- The need to "develop models that enable articulated, multiple career pathways" (p. 17);
- "Continue to develop new and innovative ways to deliver health education and training, which facilitates accelerated entry to the workforce and flexible delivery of clinical training" (p. 17);
- Develop workplace, professional and education and training practices that facilitate team approach and multidisciplinary care.

Menadue, who conducted reviews of both the New South Wales and South Australian health systems in the last 5 years, has concluded that "the structure of the workforce is more appropri-

ate to the needs of the 19th century than the 21st century" (p. 187).[49] Brooks has also argued for the development of multiskilled workers in Australia.[26]

The nature of the relationships between professionals within the health sector has been evolving, and has the potential to lead to further changes in the way in which professionals work and the nature of their roles. As the knowledge base of non-medical professionals increases, the relationships between these professionals and medical practitioners is becoming less subservient, moving from one where the relationship could be described as a treatment-prescribing relationship, to a collegial one.[50] In turn, the role of non-medical personnel is also changing from one where the non-medical professional had a treatment-performing role to one where they have a treatment-prescribing relationship with other health personnel. This changed relationship will impact on the productivity of non-medical professionals. As they move away from performing "hands on" treatment to prescribing and directing others, the number of patients or clients they can manage will increase.

There are obvious consequences of these changed relationships for educational providers. Inherent in a treatment-prescribing relationship is a monitoring and evaluation role, underlining the importance of evaluation and research skills in the educational preparation of health professionals. Similarly the development of a collegial relationship emphasises the importance of teamwork and interpersonal skills in the professional's educational preparation. A supervisory relationship with other health personnel also emphasises the importance of development of leadership skills, even for newly graduated professionals.

The changes in productivity arising from these changed relationships impact on the number of professionals required and impact on workforce requirements. Changing the nature of the tasks which can be delegated to other health personnel also changes the nature of the role. In light of anecdotal evidence that non-medical health professionals are bored with their current range of tasks, reducing the treatment-performing component of the job may lead to increased job satisfaction and improved retention.

Options for new roles

This paper has already identified a number of options for new roles within the Australian health workforce, generally involving cascading task substitution, with nurses and other health professionals undertaking roles previously provided by medical specialists. Nurses and other health professionals can also undertake the roles provided by junior doctors in training, thus helping to reduce the unhealthy hours of work that still characterise much of medical training.

New roles can also be developed at the less cognitively complex end of the task hierarchy. Mention has already been made of registered nurse/enrolled nurse substitution. There is also the potential for increased roles for allied health assistants and a change in the ratio of professional to para-professional providers of care. Expanded use of allied health assistants could reduce demand for allied health professionals, although ageing of the population and emerging new roles would suggest strong demand for these professions into the future. Development of expanded allied health assistant roles would require health agencies to identify precisely the tasks to be performed by allied health assistants and the nature of their supervision. It would require health agencies to provide (or purchase) training for the new roles.

However, these new roles will not address issues of interprofessional work or those associated with an ageing population who experience more multisystem disease and require greater levels of care coordination. There are two main alternatives (which are not mutually exclusive) for addressing interprofessional work.

The first is to develop multitasking roles using experienced practitioners. Such multitasking could, for example, focus on assessment functions where a single practitioner (be they nurse or allied health professional) undertakes a comprehensive assessment of a client's needs on behalf of all members of the care team. In this model the

advanced practitioner would then identify specific roles for each of the other team members. Such a role would require the advanced practitioner to have a comprehensive knowledge of the skills base of each of the other members of the health care team and, concomitantly, would require the other members of the team to trust the advanced practitioner that they were identifying the range of issues normally the preserve of the individual specialist practitioner. An assessment role of this kind would reduce the number of professionals interacting with clients and, if they had a continuing primary practitioner role, could improve care continuity. Fulfilment of such a role would be facilitated by agreement of common assessment protocols, possibly with ICT support.

An alternative approach would be to see the development of a new degree-level program to prepare a multiskilled health worker who would:

- have a strong science foundation;
- be registrable as an enrolled nurse;
- have a skill base drawing on functions currently performed by a range of allied health professionals including occupational therapists, physiotherapists and podiatrists.

Under this model a new degree should be introduced to incorporate common preparation in foundation sciences (eg, physiology, anatomy, human behaviour) and in a generic foundation skill set in assessing basic human physical function (including measuring physiological signs). Students should build on this so that by their third semester they will have met the competency requirements for registration as an enrolled nurse.

New educational strategies

The basic, common skill set for professional health workers in Australia should be at this level. Enrolled nurses have physical assessment skills, and some treatment skills (including provision of medication). These skills provide a very useful underpinning for a broad range of professions and will ensure that health professionals have a common language and understanding of diseases, disease processes and treatment options. Graduates from these programs could also provide the core nursing workforce in many health settings.

The three-semester foundation module would provide a platform for advanced training in a range of areas. It is expected that the largest advanced program to be offered would be to develop "rehabilitation therapists". The graduates from this stream would have competencies across a broad range of the rehabilitation professions including, for example, patient mobilisation skills. Additional fundamental sciences may also be provided in this program (eg, in anatomy) to ensure a sound theoretical basis for practice. Although graduates of the program would not be registrable in any additional health profession (such as physiotherapy), they would have the skills to provide therapy under the direction of other health professionals. They should also be able to practise with remote videoconference supervision in small rural centres. This type of multiskilled worker would also be particularly relevant in home-based programs, reducing the number of separate professionals required to provide care in domiciliary settings.

Lateral entry

Graduate entry (masters qualification) is required for speech pathology in North America, and is being phased in over the next 5 years for physiotherapy and occupational therapy in the US and Canada. A number of universities in Australia already provide graduate entry masters programs for a number of the health professions, and an increased emphasis on graduate preparation for the health professions in Australia is probably inevitable.

The new workforce model should involve a major expansion of graduate entry programs for health professional education, with phasing out of undergraduate preparation for most health professions (other than nursing) in favour of preparing graduates for these preferences through intensive 2-year graduate entry masters programs. As well as being consistent with North American developments for the professions, the 2-year masters program responds to calls for shorter educational programs for professions to facilitate career

mobility, career advancement and retraining through a career.

Downsides of graduate entry programs are the increased length of the programs and their cost to students. The multiskilled worker program as outlined above could be developed as an accelerated program with use of summer semesters. In this way the undergraduate and masters program may be able to be completed in 4 years, thus not requiring an increase in the overall time taken to graduate as a therapist in the traditional disciplines. With early recognition as enrolled nurses, students would be able to increase their earning capacity during their study. Coupled with the wider availability of income-contingent loans for postgraduate study, this will mitigate any adverse equity consequences of a greater emphasis on graduate-entry, full-fee preparation for the professions.

Conclusion

Preparation of the health workforce in Australia requires radical transformation. The changes in the health workplace have not led to a fundamental rethink of the way in which professionals ought to be prepared for this environment.

Transformation of the health workforce will not be easy. Despite regular calls for reconfiguration of roles, such changes will disrupt current power and status hierarchies in the health sector and so will be challenged from the perspective of professional self-interest, advocating "social closure" of professional roles.[51] The counter-position, of improved efficiency in health services, will thus need to be continually emphasised to ensure that the benefits of reform are highlighted.

Competing interests

None identified.

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